

APPENDIX E

Agency Coordination/Consultation Letters



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

Environmental Section

October 7, 2005

David M. Bernhart
Assistant RA for Protected Resources
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, FL 33701

Dear Mr. Bernhart:

This letter is in regard to the Texas City Channel Deepening Project, Texas City, Galveston County, Texas (Enclosed Figure). The project proposes to deepen the existing 40-foot channel and turning basin to a depth of 45 feet. Dredged material would be beneficially used to construct confined areas for dredged maintenance material, eventually becoming emergent wetland habitat. Sand dredged from the existing Texas City Channel is proposed to be placed on the north side of the Texas City Dike. Two armored groins will be constructed to aid in reduction of long shore transport of sand material back into the Texas City Channel. This is essentially the same project that was addressed in the Shoal Point Container Terminal Project (Permit No. 21979).

To ensure compliance with the requirements of Section 7, subsection (a)(2) of the Endangered Species Act Amendments of 1978, a list of any species which is listed or proposed to be listed, that may be present in the area of the proposed action is requested.

If you or your staff have any questions regarding this activity, please contact Kristy Morten at (409) 766-3195.

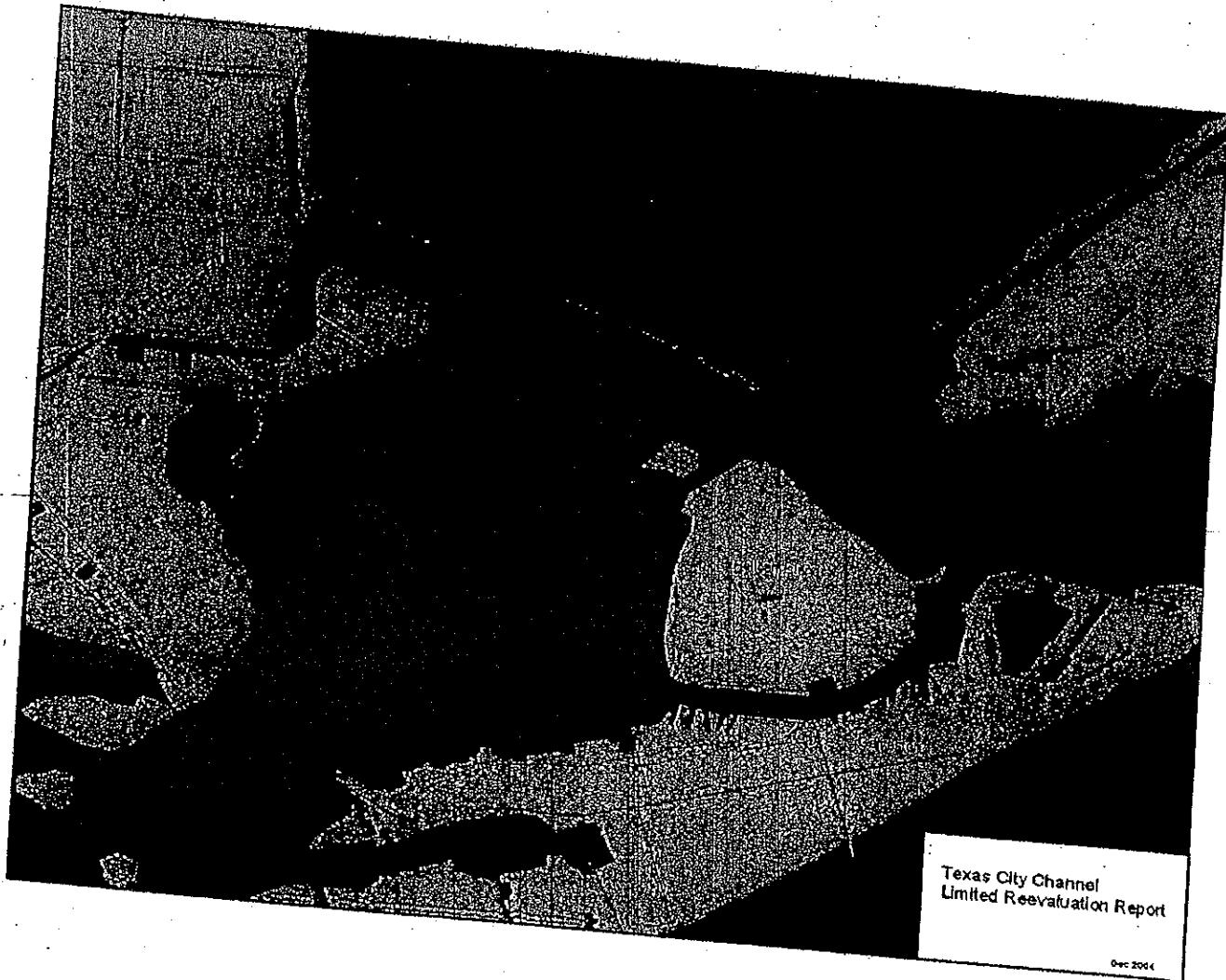
Enclosure

CF:

Mr. Rusty Swafford
National Marine Fisheries Service
Habitat Conservation Division
4700 Avenue U
Galveston, Texas 77551

Sincerely,

Carolyn Murphy
Carolyn Murphy
Chief, Environmental Section





REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

February 7, 2006

Environmental Section

David M. Bernhart
Assistant RA for Protected Resources
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, FL 33701

Dear Mr. Bernhart:

This is in response to your October 13, 2005 letter expressing concerns that the proposed Federal Texas City Channel deepening project will impact Federally listed species that may occur in the project area. Areas designated as critical habitat are essential to the conservation of a listed species and may require special management considerations or protection. Federal agencies may not fund, authorize, license, permit, or carry out an action that would destroy or adversely modify critical habitat.

The project proposes to deepen the existing 40-foot Texas City Channel and turning basin to a depth of 45 feet. This project is expected to be completed using a hydraulic pipeline dredge. Dredged material would be beneficially used to construct confined areas for dredged maintenance material adjacent to Shoal Point and Pelican Island. After the areas have reached a predetermined target elevation, the areas will be contoured, planted and shaped to form approximately 664 acres of intertidal marsh which is expected to benefit the production of fish and wildlife habitat. Sand dredged from the existing Texas City Channel is proposed to be placed on the north side of the Texas City Dike. Two armored groins will be constructed from new work material from the channel bend easing area to aid in reduction of long shore transport of sand material back into the Texas City Channel. This is essentially the same project that was addressed in the Shoal Point Container Terminal Project (Permit No. 21979).

The National Marine Fisheries Service (NMFS) has listed eight endangered and three threatened species that are under the jurisdiction of the NMFS for the state of Texas. The blue whale, finback whale, humpback whale, sei whale, sperm whale, hawksbill sea turtle, Kemp's ridley sea turtle, and the leatherback sea turtle are listed as endangered. The NMFS has listed the loggerhead sea turtle, the green sea turtle, and the gulf Sturgeon as threatened for the state of Texas.

The distribution of the blue whale in the western North Atlantic generally extends from the Arctic to at least mid-latitude waters, where it migrates to feeding grounds in the spring

and summer after wintering in subtropical and tropical waters. The blue whale is best considered as an occasional visitor in US Atlantic Exclusive Economic Zone (EEZ) waters, which may represent the current southern limit of its feeding. Records suggested an occurrence of this species south to Florida and the Gulf of Mexico, although the actual southern limit of the species' range is unknown.

Finback whales are common in waters of the US Atlantic Exclusive Economic Zone (EEZ), principally from Cape Hatteras northward. At-sea sightings in the north-central Gulf of Mexico confirm their presence throughout the year. Finback whales feed mainly on pelagic crustaceans and fish and are known to come close to shore in pursuit of fish along the New England coast. No sightings or records of finback whales are known to occur in the nearshore waters adjacent to the study area in the northwestern Gulf of Mexico.

Humpback whales occur in all oceans. In the western North Atlantic they migrate between their summer feeding grounds off Cape Cod to their winter calving and breeding grounds in the Caribbean. A total of four sightings and five captures in the Gulf of Mexico were reported, with the only recorded humpback whale sighting in Texas occurring off of Galveston.

Often found in deeper waters, Sei whales occur in all oceans, but are rare in tropical or polar seas. They are widely distributed in nearshore waters of the North Atlantic from the Gulf of Mexico and the Caribbean to Nova Scotia and Newfoundland. Their occurrence in the Gulf of Mexico is limited to strandings from Campeche, Mexico, Mississippi and Louisiana and to one probable at-sea sighting. No record of their occurrence in the nearshore waters of the study area exists. Although known to take fish prey, sei whales (like right whales) are largely planktivorous, feeding primarily on euphausiids and copepods.

Sperm whales are found throughout the world's oceans in deep waters to the edge of the ice at both poles. Although at least four sperm whale strandings have been recorded along the beaches of South Padre Island, its normal range is limited to the deeper waters beyond the continental shelf where it forages for squid and other deepwater species. Sperm whales appear to be the most abundant large cetacean in the Gulf of Mexico.

The relatively shallow Galveston Bay system is not suitable habitat for whales. The likelihood of encountering a whale in the project area is considered remote.

The Gulf sturgeon, also known as the Gulf of Mexico sturgeon, is a subspecies of the Atlantic sturgeon. Adult fish are bottom feeders, eating primarily invertebrates, including brachiopods, insect larvae, mollusks, worms and crustaceans. Gulf sturgeon are anadromous, with reproduction occurring in fresh water. Most adult feeding takes place in the Gulf of Mexico and its estuaries. The fish return to breed in the river system in which they hatched. Spawning occurs in areas of deeper water with clean (rock and rubble) bottoms. The eggs are

sticky and adhere in clumps to snags, outcroppings, or other clean surfaces. Historically, the Gulf sturgeon occurred from the Mississippi River to Charlotte Harbor, Florida. It still occurs, at least occasionally, throughout this range, but in greatly reduced numbers. The fish is essentially confined to the Gulf of Mexico. River systems where the Gulf sturgeon are known to be viable today include the Mississippi, Pearl, Escambia, Yellow, Choctawhatchee, Apalachicola, and Swannee Rivers, and possibly others. The likelihood of encountering the Gulf sturgeon in the project area is possible, but only remotely probable.

All five sea turtle species have been reported along the Texas Coast, but the leatherback and hawksbill are the least common in the northwestern Gulf of Mexico and least likely to enter Texas bays. The leatherback is an oceanic species which does not normally enter estuaries. The hawksbill prefers rock or coral reefs in more tropical waters. The other three species of sea turtles, when sighted, are frequently found in coastal waters and bays. The green sea turtle is herbivorous and is most likely to occur in the southern bays of Texas where clear water and seagrass and algal beds are more abundant than in the study area of the upper Texas coast. Adult loggerheads are more commonly found offshore around oil platforms and rock reefs, but the juveniles are more likely to enter the bays to feed. The Kemp's ridley sea turtle migrates along the coast of Texas and is probably the most common sea turtle in Texas. It frequently enters bays to feed on shrimp, crab, and other invertebrates. Of all the sea turtles, only the Kemp's ridley and the loggerhead, have been recorded from Galveston Bay, with a loggerhead having been sighted in the Bolivar Roads area.

If present in the area, dredging activities may affect these sea turtle species through an increase in sedimentation and turbidity. The sedimentation may impact food sources for the turtles, and the turbidity could affect primary productivity. This would be short-term, however. There should be no physical impacts to sea turtles, as they are highly mobile and can avoid the cutterhead dredge expected to be used for this project. Pipeline dredges are relatively stationary and, therefore, act on small areas at any given time. An increase in marine traffic could result in a higher incidence of collision with sea turtles. There is no designated critical habitat identified for sea turtles in the project area and sea turtles are not expected to nest in the project area due to the lack of suitable habitat.

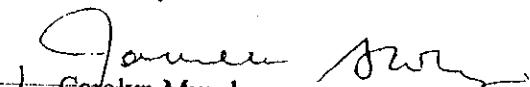
Nine fish species and one invertebrate are listed as Species of Concern (SOC) for the state of Texas: dusky shark, goliath grouper, largetooth sawfish, night shark, saltmarsh topminnow, sand tiger shark, speckled hind, Warsaw grouper, white marlin and the ivory bush coral. SOC are not protected under the Endangered Species Act, but are listed because of concerns about their status and should be considered during project planning. These species are listed due to their declining numbers, or in some cases, their slow recovery, and loss of habitat. Although remote, these fish could occur in the Texas City Channel project area, with the exception of the largetooth sawfish, saltmarsh topminnow, and the sand tiger shark that prefer shallow water depths. The Texas City Channel project area is not suitable habitat for the ivory bush coral. No Designated Critical Habitat under the jurisdiction of NMFS was

identified in the project area.

This review of the Texas City Channel deepening project activities relative to compliance with requirements of Section 7, subsection (a)(2) of the Endangered Species Act Amendments of 1978, indicates the project may affect, but is not likely to have a significant adverse affect on the listed species or critical habitat.

If you or your staff have any questions regarding this activity, please contact Kristy Morten at (409) 766-3195.

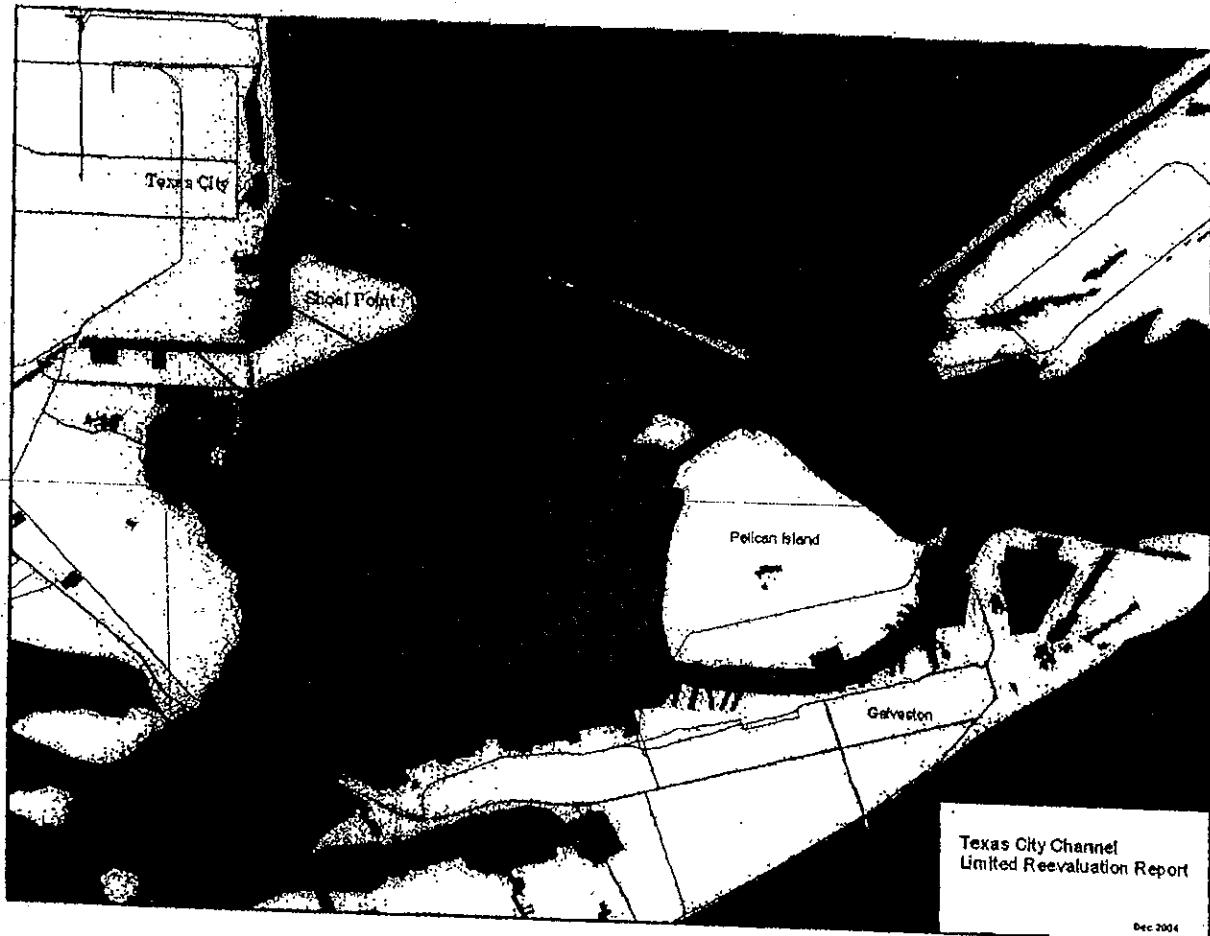
Sincerely,


for Carolyn Murphy
Chief, Environmental Section

Enclosure

CF:

Mr. Rusty Swafford
National Marine Fisheries Service
Habitat Conservation Division
4700 Avenue U
Galveston, Texas 77551



Texas City Channel
Limited Reevaluation Report

Dec 2004



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701
(727) 824-5312, Fax 824-5309
<http://sero.nmfs.noaa.gov>

OCT 13 2005

Dear Colleague:

The National Marine Fisheries Service (NOAA Fisheries) Protected Resources Division has reviewed your letter pursuant to section 7(a)(2) of the Endangered Species Act (ESA) concerning the Texas City Channel Deepening Project, Texas City, Galveston County, Texas.

There are no ESA-listed species or designated critical habitat under our purview in the action area.

We cannot determine impacts to threatened or endangered species, or designated critical habitat, under NOAA Fisheries purview because the letter lacks sufficient information to evaluate the project. Enclosed are guidelines to conduct a proper biological evaluation.

Please provide a letter from the lead federal action agency designating you to conduct ESA section 7 consultation with this office.

X Enclosed is a list of federally-protected species under the jurisdiction of NOAA Fisheries for the state of Texas. Biological information on federally-protected species and candidate species can be found at the following website addresses: http://www.nmfs.noaa.gov/prot_res/prot_res.html; <http://noflorida.fws.gov/SeaTurtles/seaturtle-info.htm>; <http://endangered.fws.gov/wildlife.html#Species>; <http://www.cmc-ocean.org/main.php3>; <http://floridaconservation.org/psm/turtles/turtle.htm>; http://obis.env.duke.edu/data/sp_profiles.php; www.mote.org/~colins/Sawfish/SawfishHomePage.html; www.floridasawfish.com; www.flmnh.usf.edu/fish/sharks/InNews/sawprop.htm; Gulf sturgeon critical habitat rule and maps (<http://alabama.fws.gov/gs/>); <http://www.cccturtle.org>;

It is NOAA Fisheries opinion that the project will have no effect on listed species or critical habitat protected by the ESA under NOAA Fisheries purview. No further consultation with NOAA Fisheries pursuant to section 7(a)(2) of the ESA is required unless the project description changes.

Consultation with NOAA Fisheries, Habitat Conservation Division (HCD), pursuant to the Magnuson-Stevens Fishery Conservation and Management Acts requirements for essential fish habitat consultation may be required. Please contact HCD at (727) 570-5317. If you have any ESA questions, please contact the consulting biologist, at (727) 824-5312, or by e-mail at eric.hawk@noaa.gov, or our ESA section 7 coordinator, Eric Hawk, at the same number or by e-mail at

Other:

Sincerely,

Teletha Mincey

Teletha Mincey
Administrative Support Assistant
Protected Resources Division

Enclosure
File: 1514-22.b
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Endangered and Threatened Species and Critical Habitats
under the Jurisdiction of the NOAA Fisheries



Texas

Listed Species	Scientific Name	Status	Date Listed
Marine Mammals			
blue whale	<i>Balaenoptera musculus</i>	Endangered	12/02/70
finback whale	<i>Balaenoptera physalus</i>	Endangered	12/02/70
humpback whale	<i>Megaptera novaengliae</i>	Endangered	12/02/70
sei whale	<i>Balaenoptera borealis</i>	Endangered	12/02/70
sperm whale	<i>Physeter macrocephalus</i>	Endangered	12/02/70
Turtles			
green sea turtle	<i>Chelonia mydas</i>	Threatened ¹	07/28/78
hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Endangered	06/02/70
Kemp's ridley sea turtle	<i>Lepidochelys kempii</i>	Endangered	12/02/70
leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered	06/02/70
loggerhead sea turtle	<i>Caretta caretta</i>	Threatened	07/28/78
Fish			
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	Threatened	09/30/91

Designated Critical Habitat

None

Species Proposed for Listing

Acropora palmata (elkhorn coral)
Acropora cervicornis (staghorn coral)

Proposed Critical Habitat

None

¹ Green turtles are listed as threatened, except for breeding populations of green turtles in Florida and on the Pacific Coast of Mexico, which are listed as endangered.



Texas

Candidate Species ²	Scientific Name
none	

Species of Concern ³	Scientific Name
Fish	
dusky shark	<i>Carcharhinus obscurus</i>
goliath grouper	<i>Epinephelus itajara</i>
largetooth sawfish	<i>Pristis pristis</i>
night shark	<i>Carcharhinus signatus</i>
saltmarsh topminnow	<i>Fundulus jenkinsi</i>
sand tiger shark	<i>Odontaspis taurus</i>
speckled hind	<i>Epinephelus drummondhayi</i>
Warsaw grouper	<i>Epinephelus nigritus</i>
white marlin	<i>Tetrapturus albidus</i>
Invertebrates	
ivory bush coral	<i>Oculina varicosa</i>

² The Candidate Species List has been renamed the Species of Concern List. The term "candidate species" is limited to species that are the subject of a petition to list and for which NOAA Fisheries has determined that listing may be warranted (69 FR 19975).

³ Species of Concern are not protected under the Endangered Species Act, but concerns about their status indicate that they may warrant listing in the future. Federal agencies and the public are encouraged to consider these species during project planning so that future listings may be avoided.



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ATTENTION OF

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

Environmental Section

October 7, 2005

Mr. Carlos Mendoza
Field Supervisor
U.S. Fish and Wildlife Service
17629 El Camino Real, Suite 211
Houston, Texas 77058

Dear Mr. Mendoza:

This letter is in regard to the Texas City Channel Deepening Project, Texas City, Galveston County, Texas (Enclosed Figure). The project proposes to deepen the existing 40-foot channel and turning basin to a depth of 45 feet. Dredged material would be beneficially used to construct confined areas for dredged maintenance material, eventually becoming emergent wetland habitat. Sand dredged from the existing Texas City Channel is proposed to be placed on the north side of the Texas City Dike. Two armored groins will be constructed to aid in reduction of long shore transport of sand material back into the Texas City Channel. This is essentially the same project that was addressed in the Shoal Point Container Terminal Project (Permit No. 21979).

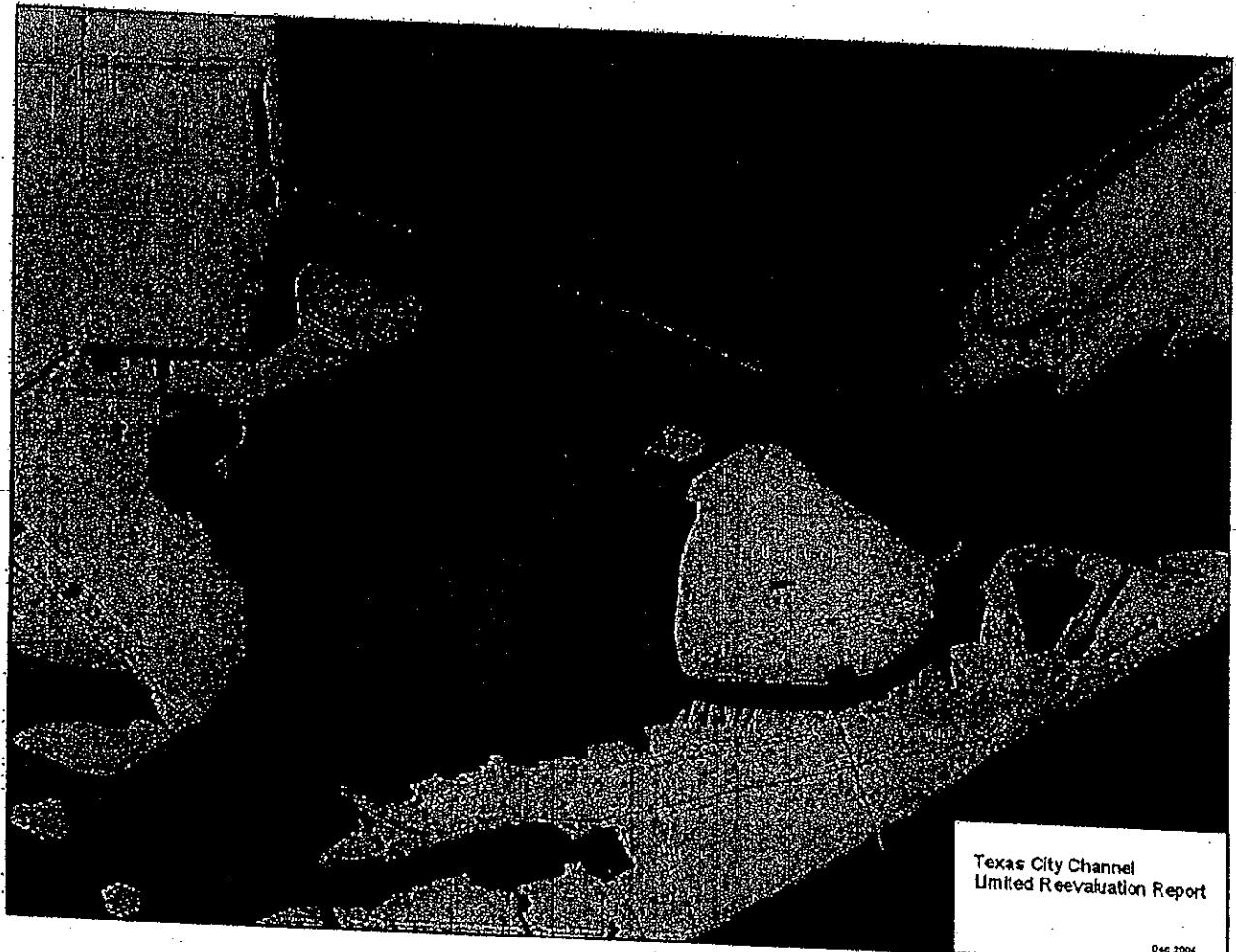
To ensure compliance with the requirements of Section 7, subsection (a)(2) of the Endangered Species Act Amendments of 1978, a list of any species which is listed or proposed to be listed, that may be present in the area of the proposed action is requested.

If you or your staff have any questions regarding this activity, please contact Kristy Morten at (409) 766-3195.

Sincerely,

Carolyn Murphy
Carolyn Murphy
Chief, Environmental Section

Enclosure



Texas City Channel
Limited Reevaluation Report

Dec 2004



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701
(727) 824-5312, Fax 824-5309
<http://sero.nmfs.noaa.gov>

OCT 13 2005

Dear Colleague:

The National Marine Fisheries Service (NOAA Fisheries) Protected Resources Division has reviewed your letter pursuant to section 7(a)(2) of the Endangered Species Act (ESA) concerning the Texas City Channel Deepening Project, Texas City, Galveston County, Texas.

There are no ESA-listed species or designated critical habitat under our purview in the action area.

We cannot determine impacts to threatened or endangered species, or designated critical habitat, under NOAA Fisheries purview because the letter lacks sufficient information to evaluate the project. Enclosed are guidelines to conduct a proper biological evaluation.

Please provide a letter from the lead federal action agency designating you to conduct ESA section 7 consultation with this office.

Enclosed is a list of federally-protected species under the jurisdiction of NOAA Fisheries for the state of Texas. Biological information on federally-protected species and candidate species can be found at the following website addresses: http://www.nmfs.noaa.gov/prot_res/prot_res.html; <http://noflorida.fws.gov/SeaTurtles/seaturtle-info.htm>; <http://endangered.fws.gov/wildlife.html#Species>; <http://www.cmc-ocean.org/main.php3>; <http://floridaconservation.org/psm/turtles/turtle.htm>; http://obis.env.duke.edu/data/sp_profiles.php; www.mote.org/~colins/Sawfish/SawfishHomePage.html; www.floridasawfish.com; www.flmnh.ufl.edu/fish/sharks/InNews/sawprop.htm; Gulf sturgeon critical habitat rule and maps (<http://alabama.fws.gov/gs/>); <http://www.cccturtle.org>.

It is NOAA Fisheries opinion that the project will have no effect on listed species or critical habitat protected by the ESA under NOAA Fisheries purview. No further consultation with NOAA Fisheries pursuant to section 7(a)(2) of the ESA is required unless the project description changes.

Consultation with NOAA Fisheries, Habitat Conservation Division (HCD), pursuant to the Magnuson-Stevens Fishery Conservation and Management Acts requirements for essential fish habitat consultation may be required. Please contact HCD at (727) 570-5317. If you have any ESA questions, please contact the consulting biologist, at (727) 824-5312, or by e-mail at eric.hawk@noaa.gov. or our ESA section 7 coordinator, Eric Hawk, at the same number or by e-mail at eric.hawk@noaa.gov.

Other: _____

Sincerely,

Teletha Mincey
Teletha Mincey
Administrative Support Assistant
Protected Resources Division

Enclosure
File: 1514-22.b
<O:\FORMS\Form letters\specieslistltr51wpd.wpd>





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Division of Ecological Services

17629 El Camino Real #211
Houston, Texas 77058-3051
281/286-8282 / (FAX) 281/488-5882



December 2, 2005

Carolyn Murphy
Chief, Environmental Section
Department of the Army
Galveston District, Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

Dear Ms. Murphy:

This responds to your letter dated October 7, 2005, requesting information on federally listed species that may occur in the Corps of Engineers' Texas City Channel Deepening Project area, located in Galveston County, Texas. The project proposes to deepen the existing 40-foot channel and turning basin to a depth of 45 feet.

A review of Service files indicates that the following species and critical habitat may occur in your project area:

- Attwater's greater prairie-chicken (*Tympanuchus cupido attwateri*) - Endangered
- Brown pelican (*Pelecanus occidentalis*) - Endangered
- Piping plover (*Charadrius melanotos*) - Threatened, with critical habitat
- Kemp's ridley sea turtle (*Lepidochelys kempii*) - Endangered
- Loggerhead sea turtle (*Caretta caretta*) - Threatened
- Green sea turtle (*Chelonia mydas*) - Threatened

You should evaluate your project for potential effects to these species. The Service's Consultation Handbook is available online to assist you with further information on definitions, process, and fulfilling Endangered Species Act requirements at <http://endangered.fws.gov/consultations/s7hndbk/s7hndbk.htm>. In addition, the NOAA Fisheries Protected Resource Branch (David Bernhart, 727/551-5767) should be contacted for additional information on listed species under their jurisdiction.

If you have any questions, please contact Catherine Yeargan or Moni Belton at 281/286-8282.

Sincerely,

Carlos H. Mendoza
Field Supervisor, Clear Lake ES Field Office



Carolyn Murphy
Galveston District, Corps of Engineers
December 2, 2005
Page 2

cc

David Bernhart, NOAA Fisheries Protected Resources Division, St. Petersburg, Florida

From: Stephanie Shelton [Stephanie.Shelton@tpwd.state.tx.us]
Sent: Wednesday, April 19, 2006 2:13 PM
To: Morten, Kristy L SWG
Subject: RE: T&E species list

Attachments: morten_kristy_041906.zip
Hi Kristy,

Attached you will find a .zip file that contains the response to your information request. Contained in the .zip file is a county list of T&E and Rare species elemental occurrences for Galveston County as you requested. This list contains information for species that we may not have locational data for at this time, but may be in the area. Lastly, the .zip file also contains documents that will guide you in appropriate use of the data, definition and restrictions of the data, and data interpretation.

I am now answering all information requests so if you need anything else or have any questions let me know!

These data are not all inclusive and **cannot** be used as presence/absence data. They represent species that could potentially be in your project area. This information cannot be substituted for on-the-ground surveys. For the USFWS species lists please visit:
http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.EntryPage

Stephanie

Stephanie Shelton

Natural Diversity Database Technician

Texas Parks and Wildlife Department
3000 IH-35, Suite 100
Austin, TX 78704
office: 512.912.7053; fax: 512.912.7058
stephanie.shelton@tpwd.state.tx.us

Due to the number of requests, we have a one week turn-around. Thanks for your patience

From: Morten, Kristy L SWG [mailto:kristy.l.morten@SWG02.usace.army.mil]
Sent: Wednesday, April 19, 2006 1:02 PM
To: Nancy Gillespie
Subject: T&E species list

Nancy-

Hi. Would you please provide me a copy of the state-listed Threatened and Endangered species for Galveston County? Thanks in advance for your assistance.

Regards-
Kristy Morten
Environmental Specialist
ARMY CORPS OF ENGINEERS
GALVESTON DISTRICT

***** BIRDS *****

Arctic Peregrine Falcon (<i>Falco peregrinus tundrius</i>) - potential migrant	DL	T
Attwater's Greater Prairie-chicken (<i>Tympanuchus cupido attwateri</i>) - open prairies of mostly thick grass one to three feet tall; from near sea level to 200 feet along coastal plain on upper two-thirds of Texas coast; males form communal display flocks during late winter-early spring; booming grounds important; breeding February-July	LE	E
Bald Eagle (<i>Haliaeetus leucocephalus</i>) - found primarily near seacoasts, rivers, and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds	LT-PDL	T
Black Rail (<i>Laterallus jamaicensis</i>) - salt, brackish, and freshwater marshes, pond borders, wet meadows, & grassy swamps; nests in or along edge of marsh, sometimes on damp ground, but usually on mat of previous year's dead grasses; nest usually hidden in marsh grass or at base of Salicornia		
Brown Pelican (<i>Pelecanus occidentalis</i>) - largely coastal and near shore areas, where it roosts on islands and spoil banks	LE	E
Henslow's Sparrow (<i>Ammodramus henslowii</i>) - wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking; likely to occur, but few records within this county		
Mountain Plover (<i>Charadrius montanus</i>) - shortgrass plains and plowed fields (bare, dirt fields); primarily insectivorous; winter resident in this area		
Piping Plover (<i>Charadrius melanotos</i>) - wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats	LT	T
Reddish Egret (<i>Egretta rufescens</i>) - resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear		T
Snowy Plover (<i>Charadrius alexandrinus</i>) - wintering migrant along the Texas Gulf Coast beaches and bayside mud or salt flats		
Tern (<i>Sterna fuscata</i>) - predominately "on the wing"; does not dive, but snatches small fish and squid with bill as it flies or hovers over water; breeding April-July		T
Swallow-tailed Kite (<i>Elanoides forficatus</i>) - lowland forested regions, especially swampy areas, ranging into open woodland; marshes, along rivers, lakes, and ponds; nests high in tall tree in clearing or on forest woodland edge, usually in pine, cypress, or various deciduous trees		T
White-faced Ibis (<i>Plegadis chihi</i>) - prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats		T
White-tailed Hawk (<i>Buteo albicaudatus</i>) - near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May		T
Whooping Crane (<i>Grus americana</i>) - potential migrant; winters in and around Aransas National Wildlife Refuge and migrates to Canada for breeding; only remaining natural breeding population of this species	LE	E

Wood Stork (*Mycteria americana*) - forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960

T

*** BIRDS-RELATED ***

Colonial waterbird nesting areas - many rookeries active annually

Migratory songbird fallout areas - oak mottes and other woods/thickets provide foraging/roosting sites for neotropical migratory songbirds

FISHES

American Eel (*Anguilla rostrata*) - most aquatic habitats with access to ocean; spawns January-February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries

*** MAMMALS ***

Black Bear (*Ursus americanus*) - within historical range of Louisiana Black Bear in eastern Texas, Black Bear is federally listed threatened and inhabits bottomland hardwoods and large tracts of undeveloped forested areas; in remainder of Texas, Black Bear is not federally listed and inhabits desert lowlands and high elevation forests and woodlands; dens in tree hollows, rock piles, cliff overhangs, caves, or under brush piles

T/SA; NL T

Louisiana Black Bear (*Ursus americanus luteolus*) - possible as transient; bottomland hardwoods and large tracts of inaccessible forested areas

LT T

Plains Spotted Skunk (*Spilogale putorius interrupta*) - catholic in habitat; open fields, prairies, croplands, fence rows, farmyards, forest edges, and woodlands; prefers wooded, brushy areas and tallgrass prairie

West Indian Manatee (*Trichechus manatus*) - Gulf and bay system; opportunistic, aquatic herbivore

LE E

*** MOLLUSKS ***

Pistolgrip (*Tritogonia verrucosa*) - stable substrate, rock, hard mud, silt, and soft bottoms, often buried deeply; east and central Texas, Red through San Antonio River basins

T

*** REPTILES ***

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LE E
LT T

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Kemp's Ridley Sea Turtle (<i>Lepidochelys kempii</i>) - Gulf and bay system	LE	E
Leatherback Sea Turtle (<i>Dermochelys coriacea</i>) - Gulf and bay system	LE	E
Loggerhead Sea Turtle (<i>Caretta caretta</i>) - Gulf and bay system	LT	T
Smooth Green Snake (<i>Liophidophis vernalis</i>) - Gulf Coastal Plain; mesic coastal shortgrass prairie vegetation; prefers dense vegetation		T
Texas Diamondback Terrapin (<i>Malaclemys terrapin littoralis</i>) - coastal marshes, tidal flats, coves, estuaries, and lagoons behind barrier beaches; brackish and salt water; burrows into mud when inactive; may venture into lowlands at high tide		
Texas Horned Lizard (<i>Phrynosoma cornutum</i>) - open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive; breeds March-September		T
Timber/Canebrake Rattlesnake (<i>Crotalus horridus</i>) - swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland; limestone bluffs, sandy soil or black clay; prefers dense ground cover, i.e. grapevines or palmetto		T

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Houston daisy (<i>Rayjacksonia aurea</i>) - endemic; seasonally wet, saline barren areas, around the base of mima mounds in coastal prairies, or barren to somewhat vegetated openings in grasslands, including pastures and roadsides, on loamy to sandy loam soils; flowering October-November
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E, T - State Listed Endangered/Threatened

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Species appearing on these lists do not all share the same probability of occurrence. Some species are migrants or wintering residents only, or may be historic or considered extirpated.

Additional Agency Coordination/Consultation Letters

United States Fish and Wildlife Service

From: Moni_Belton@fws.gov
Sent: Wednesday, December 06, 2006 3:34 PM
To: Morten, Kristy L SWG
Subject: Re: FW: TX City PDT Meeting

Kristi,

The USFWS agreed to provide a planning aid letter according to the SOW dated FY 2005/2006.

The decision to provide a planning aid letter was based on the amount of USFWS involvement with the USACE throughout the development of the Texas City Shoal Point Container Terminal (TCSPCT) Project and Environmental Impact Statement. It was our understanding the current Federal Project to deepen the Texas City Channel would use this document as a guide and include USFWS recommendations made for the TCSPCT project. We have been attending meetings and providing recommendations when needed. If a CAR is required, additional funding will be needed to ensure appropriate staff time from the USFWS Clear Lake ES field office.

Thank you,

Moni

Moni DeVora Belton
Fish and Wildlife Biologist
USFWS Ecological Services
17629 El Camino Real
Suite 211
Houston TX 77058-3051
281-286-8282
281-488-5882 fax

Texas Parks and Wildlife Department

From: Stephanie Shelton [Stephanie.Shelton@tpwd.state.tx.us]
Sent: Wednesday, April 19, 2006 2:13 PM
To: Morten, Kristy L SWG
Subject: RE: T&E species list

Attachments: morten_kristy_041906.zip
Hi Kristy,

Attached you will find a .zip file that contains the response to your information request. Contained in the .zip file is a county list of T&E and Rare species elemental occurrences for Galveston County as you requested. This list contains information for species that we may not have locational data for at this time, but may be in the area. Lastly, the .zip file also contains documents that will guide you in appropriate use of the data, definition and restrictions of the data, and data interpretation.

I am now answering all information requests so if you need anything else or have any questions let me know!

These data are not all inclusive and **cannot** be used as presence/absence data. They represent species that could potentially be in your project area. This information cannot be substituted for on-the-ground surveys. For the USFWS species lists please visit:
http://ecos.fws.gov/tess_public/servlet/gov.doi.tess_public.servlets.EntryPage

Stephanie

Stephanie Shelton

Natural Diversity Database Technician

Texas Parks and Wildlife Department
3000 IH-35, Suite 100
Austin, TX 78704
office: 512.912.7053; fax: 512.912.7058
stephanie.shelton@tpwd.state.tx.us

***** BIRDS *****

Arctic Peregrine Falcon (<i>Falco peregrinus tundrius</i>) - potential migrant	DL	T
Attwater's Greater Prairie-chicken (<i>Tympanuchus cupido attwateri</i>) - open prairies of mostly thick grass one to three feet tall; from near sea level to 200 feet along coastal plain on upper two-thirds of Texas coast; males form communal display flocks during late winter-early spring; booming grounds important; breeding February-July	LE	E
Bald Eagle (<i>Haliaeetus leucocephalus</i>) - found primarily near seacoasts, rivers, and large lakes; nests in tall trees or on cliffs near water; communally roosts, especially in winter; hunts live prey, scavenges, and pirates food from other birds	LT-PDL	T
Black Rail (<i>Laterallus jamaicensis</i>) - salt, brackish, and freshwater marshes, pond borders, wet meadows, & grassy swamps; nests in or along edge of marsh, sometimes on damp ground, but usually on mat of previous year's dead grasses; nest usually hidden in marsh grass or at base of Salicornia		
Brown Pelican (<i>Pelecanus occidentalis</i>) - largely coastal and near shore areas, where it roosts on islands and spoil banks	LE	E
Henslow's Sparrow (<i>Ammodramus henslowii</i>) - wintering individuals (not flocks) found in weedy fields or cut-over areas where lots of bunch grasses occur along with vines and brambles; a key component is bare ground for running/walking; likely to occur, but few records within this county		
Mountain Plover (<i>Charadrius montanus</i>) - shortgrass plains and plowed fields (bare, dirt fields); primarily insectivorous; winter resident in this area		
Piping Plover (<i>Charadrius melodus</i>) - wintering migrant along the Texas Gulf Coast; beaches and bayside mud or salt flats	LT	T
Reddish Egret (<i>Egretta rufescens</i>) - resident of the Texas Gulf Coast; brackish marshes and shallow salt ponds and tidal flats; nests on ground or in trees or bushes, on dry coastal islands in brushy thickets of yucca and prickly pear		T
Snowy Plover (<i>Charadrius alexandrinus</i>) - wintering migrant along the Texas Gulf Coast beaches and bayside mud or salt flats		
Tern (<i>Sterna fuscata</i>) - predominately "on the wing"; does not dive, but snatches small fish and squid with bill as it flies or hovers over water; breeding April-July		T
Swallow-tailed Kite (<i>Elanoides forficatus</i>) - lowland forested regions, especially swampy areas, ranging into open woodland; marshes, along rivers, lakes, and ponds; nests high in tall tree in clearing or on forest woodland edge, usually in pine, cypress, or various deciduous trees		T
White-faced Ibis (<i>Plegadis chihi</i>) - prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats		T
White-tailed Hawk (<i>Buteo albicaudatus</i>) - near coast on prairies, cordgrass flats, and scrub-live oak; further inland on prairies, mesquite and oak savannas, and mixed savanna-chaparral; breeding March-May		T
Whooping Crane (<i>Grus americana</i>) - potential migrant; winters in and around Aransas National Wildlife Refuge and migrates to Canada for breeding; only remaining natural breeding population of this species	LE	E

Wood Stork (*Mycteria americana*) - forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water; usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries); breeds in Mexico and birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas; formerly nested in Texas, but no breeding records since 1960

T

*** BIRDS-RELATED ***

Colonial waterbird nesting areas - many rookeries active annually

Migratory songbird fallout areas - oak mottes and other woods/thickets provide foraging/roosting sites for neotropical migratory songbirds

FISHES

American Eel (*Anguilla rostrata*) - most aquatic habitats with access to ocean; spawns January-February in ocean, larva move to coastal waters, metamorphose, then females move into freshwater; muddy bottoms, still waters, large streams, lakes; can travel overland in wet areas; males in brackish estuaries

*** MAMMALS ***

Black Bear (*Ursus americanus*) - within historical range of Louisiana Black Bear in eastern Texas, Black Bear is federally listed threatened and inhabits bottomland hardwoods and large tracts of undeveloped forested areas; in remainder of Texas, Black Bear is not federally listed and inhabits desert lowlands and high elevation forests and woodlands; dens in tree hollows, rock piles, cliff overhangs, caves, or under brush piles

T/SA; NL T

Louisiana Black Bear (*Ursus americanus luteolus*) - possible as transient; bottomland hardwoods and large tracts of inaccessible forested areas

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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
9721 Executive Center Drive N.
St. Petersburg, Florida 33702
February 15, 2002

Colonel Leonard D. Waterworth
District Engineer, Galveston District
Department of the Army, Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

Dear Colonel Waterworth:

The National Marine Fisheries Service (NMFS) has reviewed the Draft Environmental Impact Statement (DEIS) for Texas City's Proposed Shoal Point Container Terminal dated January 2002. The proposed project is located in Galveston Bay adjacent to the Texas City Ship Channel. Our comments to the DEIS are as follows:

SECTION 3 - AFFECTED ENVIRONMENT

3.14.8 Essential Fish Habitat (EFH)

NMFS-1
The Gulf of Mexico Fishery Management Council has identified the proposed project area as EFH for postlarval, juvenile, subadult and adult red drum (*Sciaenops ocellatus*), white shrimp (*Litopenaeus setiferus*) and brown shrimp (*Faxonius espeuti setiferus*) and juvenile and adult Spanish mackerel (*Scomberomorus maculatus*). Therefore, references to all life stages of pink shrimp, juvenile gray snapper and stone crab should be eliminated from this section.

NMFS-2
Guidance and procedures for implementing the 1996 amendments of the Magnuson-Stevens Fishery Conservation and Management Act (MFCMA) (P.L. 104 - 297) were provided through interim final rules established by the NMFS in 1997 (50 CFR Sections 600.805 - 600.930). As set forth in the NMFS interim final rules, EFH Assessments must include: (1) a description of the proposed action; (2) an analysis of the effects, including cumulative effects, of the action on EFH, the managed species, and associated species by life history stage; (3) the Federal agency's views regarding the effects of the action on EFH; and (4) proposed mitigation, if applicable. If appropriate, the assessment also should include the results of an onsite inspection, the views of recognized experts on the habitat or species effects, a literature review, an analysis of alternatives to the proposed action, and any other relevant information. Although required by the NMFS interim final rules, there is no corresponding EFH Assessment in "SECTION 4 - ENVIRONMENTAL CONSEQUENCES".



NMFS-1: Pink shrimp, juvenile gray snapper and stone crab have been eliminated from the EFH discussions.

NMFS-2: (1) The proposed action is described in Section 2.4.
(2) An assessment of potential impacts to EFH has been added to Section 4 for each alternative and to the cumulative impacts section (Section 4.8).
(3) The views of the USACE regarding the effects of the action on EFH will be presented in the Record of Decision. (4) Mitigation is discussed in Section 4.2.15.5.

The consultation requirements in the MSFCMIA direct Federal agencies to consult with NMFS when any of their activities may have an adverse effect on EFH. The EFH rules define an adverse effect as "any impact which reduces quality and/or quantity of EFH...[and] may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat wide impacts, including individual, cumulative, or synergistic consequences of actions." Section 305(b)(4)(A) of the MSFCMIA requires that NMFS provide EFH Conservation Recommendations for Federal agency action or permit that would result in adverse impacts to EFH. However, the DEIS does not contain sufficient information as required by the EFH Interim Final rules for NMFS to provide EFH Conservation Recommendations to the Corps of Engineers (COE). Therefore, to comply with the EFH consultation requirements either: 1) the EFH assessment in the DEIS needs to be significantly revised to include a complete EFH assessment in the Final EIS and the COE must address any EFH Conservation Recommendations that NMFS may offer before developing a Record of Decision or issuing a permit; or 2) the COE may provide NMFS with a separate and complete EFH assessment prior to the publication of the Final EIS.

Section 4 - ENVIRONMENTAL CONSEQUENCES

4.2 SHOAL POINT - APPLICANT'S PROPOSED SITE

This section should include a detailed assessment of the proposed project impacts to EFH and Federally managed species. See the above comments for Section 3.14.8.

4.2.15 Aquatic Ecology

This entire section contains contradictory statements, is deficient in a true assessment of impacts to aquatic ecology and is poorly written. In fact, the first five sentences of the second paragraph are confusing and of little information concerning impacts to aquatic resources. For clarity, we recommend that the first five sentences of this paragraph be deleted. We also recommend that entire section be significantly revised to describe the project impacts to the aquatic environment in the Final EIS in order to be consistent with the requirements of the National Environmental Policy Act (NEPA).

For example the first sentence states, "The immediate area of Shoal Point provides little habitat for commercial or recreational fish species (GLO, 1996b)." This statement is not even consistent with the affected environment descriptions provided in section 3.14 AQUATIC ECOLOGY, provided in the DEIS. If the statement is supposed to be about the Shoal Point placement area, it is a terrestrial habitat and should not be covered in this section. Either way, we recommend that this sentence be deleted in the Final EIS. Another example is the statement that, "Salinity effects are not anticipated..." followed two sentences later by, "Most infaunal organisms in the area are relatively tolerant of salinity fluctuations (since they are estuarine) and would remain unaffected by any salinity changes related to dredging activities."

NMFS-3: The EFH assessment has been revised for each alternative.
NMFS conservation recommendations for EFH will be included in the ROD.

NMFS-4: In Section 4.0, a separate section detailing EFH impacts has been added to each alternative.

NMFS-5 and NMFS-6: The impacts analysis for aquatic ecology at the Shoal Point alternative, Section 4.2.15, has been revised as recommended. Sections regarding potential aquatic ecology impacts for each alternative have also been revised in Section 4.0.

NMFS-3

NMFS-4

NMFS-5

NMFS-6

The proposed dredged material placement plan will have significant permanent and temporary effects on aquatic resources. Specifically, over 100 acres of bay habitat available for aquatic life use will be converted to uplands by levee construction. There will also be a significant increase in turbidity in and around the placement areas during levee construction. Increased turbidity affects primary productivity, feeding rates of filter feeding organisms and can foul gills. Fluid mud flows resulting from the levee construction may smother benthic fauna and will change the sediment composition around the placement areas, potentially affecting benthic infaunal community composition. While the beneficial use sites are being filled and dewatered, the area within them will no longer be available for aquatic organism use. Even after the beneficial use sites are opened to the tides, it may take several years before the man-made marshes are as productive as the open water they replaced. Even though it is anticipated that the beneficial uses plan will result in an net benefit to aquatic resources, if properly planned, constructed and managed, the Final EIS must address the adverse impacts associated with the proposed project in order to be consistent with NEPA.

APPENDIX A - CLEAN WATER ACT SECTION 404/RIVERS & HARBORS ACT SECTION 10 PERMIT APPLICATION

NMFS-7: The impacts analysis for aquatic ecology at the Shoal Point alternative, Section 4.2.15, has been revised as recommended. Sections regarding potential aquatic ecology impacts for each alternative have also been revised in Section 4.0.

NMFS-7

NMFS-8: The requested changes have been made. It should be noted, however, that the applicant proposes to include an area of high marsh approximately 50 feet wide at the toe of the access road along the edge of Swan Lake. This high marsh would transition to the low marsh and would be an exception to the request that all marsh areas are within 10 meters of a marsh-water interface.

NMFS-9: A minimum of 70% areal coverage three years after planting is standard USACE condition.

Sheet 10 - We could find no records of historic sea grass growth in Swan Lake and do not believe that the mitigation area would be currently support seagrasses. Therefore, the mitigation plan should be revised to delete all references to seagrass. Swan Lake historically was a shallow secondary embayment fringed by *Spartina alterniflora* marshes. Any mitigation plan that involves restoration at Swan lake should only target the restoration of elevations suitable for the growth of *Spartina alterniflora*, not other high marsh species. Additionally, the plan view is not to scale, so we were unable to determine the exact width of the marsh channels or marsh areas. Recent studies have shown that transient fishery use of *Spartina alterniflora* marshes in the western Gulf of Mexico marshes drops off significantly within three to four meters of a marsh edge. Therefore, we recommend that: 1) the mitigation plan be revised to target the restoration of *Spartina alterniflora*; and 2) the tidal marsh channels be designed so that all marsh areas are within ten meters of a marsh-water interface (edge), rather than designing the marsh to be a certain percent open water.

NMFS-8

Sheet 11 - Parameter "4." should set the vegetative coverage goal for two years, rather than three years as proposed by the applicant. It has been our experience that two years is typically a sufficient amount of time to achieve 70 percent vegetative coverage of *Spartina alterniflora* in the Galveston Bay system and has been the mitigation standard in Texas for over 15 years. A permit condition should be added that requires the applicant investigate why the target vegetative coverage was not achieved after two years and to take any corrective actions necessary to achieve the mitigation goals.

**APPENDIX B - DREDGED MATERIAL MANAGEMENT PLAN (DRAFT REPORT) SHOAL
POINT CONTAINER TERMINAL BERGER/ABAM ENGINEERS, INC.**

6.4 Beneficial Use Sites

Pg 17 - The first sentence of the section should be revised to state, "The intent of the BUS is to create intertidal marsh habitat to produce an overall net benefit to the continued production of fish and wildlife resources." Pg 18, par 2 - The last sentence should be revised to state, "Due to potential sea level rise and/or subsidence in the area, the final BUS interior grade elevations will be developed from an elevation survey of a nearby reference marsh prior to the final filling of each new marsh cell."

6.4.1 Swan Lake

For clarity, the text should be revised to indicate that only new work days will be used in the restoration of Swan Lake.

Part D - Beneficial Use Sites

Since monitoring and maintenance of the beneficial use sites throughout the 50-year project life are vital to the ability of the project to produce the planned net environmental benefits, NMFS has been working closely with the applicant's agents and other Federal and state natural resource agencies to develop a monitoring and management plan for the project. In August 2001, NMFS provided Berger/Abam, Inc., draft monitoring criteria developed by an interagency team of biologists, which have been incorporated into the proposed Dredged Material Maintenance Plan. However since the time of this submission, we have continued to review and revise the criteria to make them easier to implement and more meaningful. The following area recommended revisions to those criteria:

Figure 5 - Stabilization of Dredge Volume

Change the Goal to "Minimize loss of dredged material from the beneficial use sites."

Change Performance Standard 2 to "Marsh loss should be no more than 30% of the initially constructed marsh area for the life of the project."

Add the following to Monitoring Method 1, "Conduct aerial photography within 60 days post-construction. Topographic surveys may be required if dredge fans are present."

Add the following to remedial Action 1, "Corrective measures such as dredging to remove the fan or vegetative plantings may be required to mitigate for the unplanned dredge fan."

NMFS-10: The requested change has been made.

NMFS-11: The requested change has been made; however, the initial phrase ("Due to... in the area") has been deleted so that the sentence begins with "The final BUS..."

NMFS-12: The requested change has been made, along with the provision that other materials could be used if, through coordination with the natural resource agencies, they are determined appropriate for success of the marsh.

NMFS-13: The requested change has been made.

NMFS-14: The requested change has been made; however, "marsh" has been changed to "BUS" to maintain consistency throughout the DMMMP.

NMFS-15: The requested change has been made.

NMFS- 16: The following statement has been added: "Consider corrective actions such as dredging to remove the fan or additional vegetative plantings to mitigate for the unplanned dredge fan."

NMFS-13

NMFS-14

NMFS-15

NMFS-16

Figure 7 - Vegetation

<p>Revise the Goal to, "Use dredged material to create aa marsh similar to nearby marshes, while minimizing impacts to other ecologically important habitats.</p>	NMFS-17	<p>NMFS-17: The requested changes have been made; however, "create a marsh" has been changed to "create a BUS".</p>
<p>Revise Performance Standard 2 to, "No more than 20% of total vegetative cover, inclusive of bare ground, will be high marsh species such as..."</p>	NMFS-18	<p>NMFS-18: The requested changes have been made.</p>
<p>Revise Monitoring Method 1 to, "Conduct site visits annually with resource agencies staff to determine species present and extent of vegetative coverage."</p>	NMFS-19	<p>NMFS-19: Revised to read, "Conduct annual site visits with local resource agency personnel to determine species present and extent of vegetative cover."</p>
<p>Revise Remedial Action 2 to, "Consider adding additional material if site is too low to support desired vegetation. Consider excavation and vegetative plantings if there is too much high marsh. Consider enhancing tidal exchange."</p>	NMFS-20	<p>NMFS-20: Revised to read, "Consider adding additional dredged material if site is too low to support desired vegetation. Consider excavation and vegetative plantings if area is too high. Consider enhancing tidal exchange."</p>
<p>Revise Goal to, "Achieve target elevations necessary to permit intertidal fluctuations of bay waters within the BUS."</p>	NMFS-21	<p>NMFS-21: The requested changes have been made.</p>
<p>Pg 32, Par 1 - Revise first sentence to state, "The intent of the BUS is to create intertidal marsh habitat to produce an overall net benefit to the continued production of fish and wildlife resources."</p>	NMFS-22	<p>NMFS-22: The requested change has been made; however, the initial phrase ("Due to... in the area") has been deleted so that the sentence begins with "The final BUS..."</p>
<p>Pg 32, Par 3 - The last sentence should be revised to, "Due to potential sea level rise and/or subsidence in the area, the final BUS interior grade elevations will be developed from an elevation survey of a nearby reference marsh prior to the final filling of each new marsh cell."</p>	NMFS-23	<p>NMFS-23: This section has been revised to indicate that natural resource agency personnel will be involved in the review and approval of reference marshes.</p>

Figure 9 - Hydrology

<p>Revise Goal to, "Achieve target elevations necessary to permit intertidal fluctuations of bay waters within the BUS."</p>	2. DESIGN GUIDELINES	
		<p>This whole section should be revised. Random selection of a natural marshes could lead to the selection of highly degraded marsh as the reference. This is unacceptable to NMFS, since the whole concept of the beneficial uses plan is to trade one type of EFH (open water) for another hopefully more productive type of habitat (estuarine emergent marsh). The selection of the natural reference marsh(es) should be based upon identification of high quality marsh habitat by natural resource agency personnel in conjunction with the COE and the project sponsor.</p>

2.1 Selection of Reference Marshes

This whole section should be revised. Random selection of a natural marshes could lead to the selection of highly degraded marsh as the reference. This is unacceptable to NMFS, since the whole concept of the beneficial uses plan is to trade one type of EFH (open water) for another hopefully more productive type of habitat (estuarine emergent marsh). The selection of the natural reference marsh(es) should be based upon identification of high quality marsh habitat by natural resource agency personnel in conjunction with the COE and the project sponsor.

NMFS-24

2.5.2 Dredged Material Placement Techniques

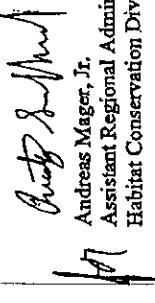
Add the following sentence to the end of the paragraph, "Prior to the design and construction of each successive BUS site, a review of the "lessons learned" from the previous marsh cells should be reviewed to refine design parameters and refine construction techniques."

2.6 Surface Elevations

The sentence should be revised to, "Due to potential sea level rise and/or subsidence in the area, the final BUS interior grade elevations will be developed from an elevation survey of a nearby reference marsh prior to the final filling of each new marsh cell."

Thank you for your consideration of our recommendations. If we may be of further assistance, please contact Mr. Rusty Swafford of our Galveston Facility at (409) 766-3699.

Sincerely,



Andreas Mager, Jr.
Assistant Regional Administrator
Habitat Conservation Division

NMFS-25: The requested changes have been made.

NMFS-25: The requested changes have been made; however, the phrase "Due to... in the area," was deleted so that the sentence begins with "The final BUS..." and "each new marsh cell" was changed to "each BUS" to maintain consistency throughout the DMMMP.

NMFS-26

NMFS-26: The sentence should be revised to, "Due to potential sea level rise and/or subsidence in the area, the final BUS interior grade elevations will be developed from an elevation survey of a nearby reference marsh prior to the final filling of each new marsh cell."



**United States Department of the Interior
FISH AND WILDLIFE SERVICE**

Division of Ecological Services
17629 El Camino Real, Suite #211
Houston, Texas 77058-3051
281/286-8282 / (FAX) 281/488-5882

February 21, 2002

Colonel Leonard D. Waterworth
Galveston District, Corps of Engineers
Attn: Regatta Branch, Sharon Manzella Trippak
P.O. Box 1229
Galveston, Texas 77553

Dear Colonel Waterworth:

We have reviewed the Draft Environmental Impact Statement (DEIS) for the City of Texas City's Proposed Shoal Point Container Terminal, Galveston County, Texas.

General Comments

The DEIS adequately compares environmental impacts between alternative sites. Based upon what the DEIS has presented, we believe Shoal Point is one of the least environmentally damaging alternatives. However, we believe that the proposed impacts to Shoal Point can be minimized by shifting the access road to the north and submitting detailed restoration plans for Swan Lake. In addition, we are concerned with the success of the proposed beneficial use sites (BUS) and guarantees that the proposed project and mitigation will be completed.

The beneficial use sites created for the Houston Ship Channel are problematic due to poor circulation, loss of material outside of the BUS foot print, and impacts caused by fluid mud flows to the surrounding area. A list of concerns was submitted in a letter dated July 10, 2001, during the preparation of the DEIS. However, most of these concerns have not yet been incorporated into the DEIS.

Specific Comments

Routeway Traffic Impact Analysis, Section 4.2.2, Page 4-35

The Service has received letters from the residents of Omega Bay who strongly oppose the proposed development of the container terminal facilities in Texas City due to air quality and noise effects caused by the increase in truck traffic. Alternate routes to the terminal should be submitted with supporting documentation demonstrating which route is the least environmentally damaging to the surrounding neighborhoods.

FWS2-2

FWS2-1: Comments noted. Responses to General Comments are provided below under Specific Comments. Also see response to FWS1 letter.

FWS2-2: In response to public comments received from many residents of communities located near Exit 7 on IH 45, public officials representing Galveston County and the cities of Texas City and La Marque have initiated discussions with TxDOT regarding the possibility of developing an alternative route for trucks to use as access between the proposed container terminal at Shoal Point and IH 45. Also see response to FL1-1 (Form Letter 1 in private citizen comment responses).



Habitat Changes, Section 4.2.10.6, Page 4-59 and Vegetation, Sec. 4.2.12, Page 4-62

We strongly recommend the 0.48-acre of wetlands located adjacent to loop 197 be avoided. The Service's interpretation of the access road footprint (see sheet 14) overlayed on the Virginia Point USGS 1995 DOQQ shows the impacts to be greater than 0.48 acres. No efforts have been made to avoid or minimize impacts to these wetlands. We believe there are more than 0.48-acre that will be impacted by the access road. One to two hundred birds can be seen utilizing this area on a daily basis. This includes ducks, colonial waterbirds, and shorebirds. In addition, rails are seen frequently feeding in this estuary and are known to nest in the same area in which they feed. This area may contain submerged aquatic vegetation (SAV) and is highly valuable habitat for a variety of fish and wildlife. We do not believe Swan Lake will support SAV growth and therefore do not believe any mitigation would be acceptable to replace this habitat once it is lost. The applicant should provide alternatives for construction and orientation of the access road.

Terrestrial Wildlife, Section 4.2.14, Page 4-63

The DEIS states "construction activities might result in the direct destruction of those organisms not mobile enough to avoid construction equipment. These would include several species of animals and if the construction takes place during the breeding season, the young of some species, including nesting and fledgling birds." Migratory birds (e.g., waterfowl, shorebirds, passerines, hawks, owls, vultures, falcons) are afforded protection under the Migratory Bird Treaty Act (MBTA) (40 Stat. 755; 16 U.S.C. 703-712). It is unlawful "by any means or manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, part, nest or egg of any such bird except as permitted by regulation. The implementing regulations contain no express authority for a permitting system for unintentional take, but rather focus on activities where killing or capturing the birds is the purpose of the take activity.

The Service strives to work with persons or entities in the modification of plans or designs so that the take of birds is eliminated, if possible. As an example, we recommend prohibiting all activity within 1500 feet of active colonial waterbird nesting areas from February 15 to September 1. The implementation of this restriction would ensure that your project does not violate the MBTA.

Although Shoal Point is not an officially recognized historic nesting site recorded in the Texas Colonial Waterbird Census database, nesting by colonial waterbirds still could occur there and all necessary precautions must be made to avoid killing nesting birds.

Appendix B
Dredge Material Management Plan (Draft Report) for Shallow Point Containment Terminal

Beneficial Use Sites, Section 6.4, Page 17

Recommendations made for the first draft of the Dredge Material Management Plan (DMMP) have not been implemented into the proposed DMMP in the DEIS. Please review the letter dated July 10, 2001 and see additional comments made below.

FWS2-3: See responses to FWS1-1 and FWS1-2.

FWS2-4: Section 4.2.14 has been revised to include FWS recommendations for avoiding impacts to migratory birds. As a result of this comment letter and the EIS process, the applicant has been made aware of his obligations with regard to the Migratory Bird Treaty Act.

FWS2-5: The 10 July 2001 letter is included in Appendix H. A summary of the concerns expressed in the letter follows:
(1) Oyster reefs should be avoided. If reefs cannot be avoided then mitigation should be conducted. In addition, oysters within 1000 feet of the proposed BUS may be damaged due to siltation and mudflows.

Response: Field truthing was conducted by resource agencies during development of the Draft DMMP. The results indicated that north of SPBUS1, the potential oyster habitat consists of shelly mud. The shelly mud had benthic organisms to support oyster habitat but no oyster reef was found. Regardless, to minimize potential impacts, SPBUS1 was located 1000 feet northeast of the shelly mud found near Swan Lake. The USACE typically does not require compensatory mitigation for impacts related to creation of Beneficial Use sites because of the habitat value associated with beneficial uses as compared to traditional placement of dredged material (i.e., in upland placement areas).

(2) Beneficial Use sites (BUS) – It is very important to maintain a sufficient amount of open water within the sites to replicate natural marsh functions. Keep the site small and create more edges; create open water channels; protect or create marsh and circulation channels at existing shorelines.

Response: See responses to EPA-9 and NMFS-8.

(3) Swan Lake – Swan Lake restoration should be completed during Phase I. A more detailed plan for marsh construction should be submitted.

Response: See responses to EPA-10, FWS1-6, and TNRCC1-2.

(4) Goals and Objectives – Changes to the goals and objectives were discussed in an interagency meeting on June 25, 2001.

Response: The results of these discussions are presented as flow charts in the revised DMMP.

FWS2-5

Colonel Leonard D. Waterworth
Attn: Regulatory Branch, Sharon Manzella Tirpak
February 21, 2004

Page 3

FWS2-6: See responses to EPA-10 and FWS1-6.

FWS2-7: See response to FWS1-7.

Swan Lake, Section 6.4.1, Page 18

The Service recommends Swan Lake restoration be completed in Phase I and that only new work material be used for the reconstruction of the marsh. A detailed restoration plan for Swan Lake must be submitted before the Service will approve the EIS or a 404 permit.

FWS2-6

Shoal Point, Section 6.4.3, Page 19

Fluid Mud Flows (FLUMF) are not addressed in the DEIS. The Service is concerned that FLUMF during and after RUS levee construction will have an adverse effect on benthic organisms and on areas that may have potential for oyster reef growth. The Service recommends a FLUMF study and monitoring plan be developed for the proposed BU sites. The monitoring plan should be modeled after the Houston-Galveston Navigation Channel Contract No. 4, Dredging Upper Bay, Atkinson Levee Field Mud Flow Report, December 2001, prepared by Turner Collie & Braden Inc. for the Port of Houston Authority and the U.S. Army Corps of Engineers. Depending on the results of the study a compensation plan may be necessary for impacts which occur to benthic organisms and oyster/shell substrate in the surrounding area.

FWS2-7

Summary

The DEIS has not yet dealt adequately with several important issues involving the reduction of impacts and protection of aquatic resources during construction. These should be addressed before the final EIS is approved or the D.A. Permit granted. Please contact Moni Devora at the Division of Ecological Service, Clear Lake Field Office, for additional coordination.

Sincerely,


Frederick T. Werner
Assistant Project Leader, Clear Lake ES Field



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Division of Ecological Services
17629 El Camino Real, Suite #211
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July 10, 2001

Mr. Chris Cornell
Project Engineer
Berger/Abam Engineers Inc
33301 Ninth Avenue South
Federal Way, WA 98003-6395

BERGER/ABAM

JUL 16 2001

RECEIVED

Dear Mr. Cornell:

The U.S. Fish and Wildlife Service (USFWS) has reviewed the first draft of the Dredge Material Management Plan (DMMP) for the Shoal Point Container Terminal located in Texas City, Galveston County, Texas.

The Service is concerned with possible impacts to fish and wildlife and their habitat caused by dredging and fill activities associated with the construction of the proposed project. Outlined below according to section number in the draft DMMP are our comments and suggestions.

4.6 Oyster Survey

All oyster reefs should be avoided. If reefs cannot be avoided, then mitigation should be conducted using Powell's¹ "The Status and Long-Term Trends of Oyster Reefs in Galveston Bay, Texas" (enclosed) as a guideline for oyster placement and reef management. In addition, oysters within 1000 feet of the proposed beneficial use sites may be damaged due to siltation and mud flows. The degree of impact will depend on sediment type and the use of water control structures along the BUS levees.

6.4 Beneficial use sites (BUS)

It is very important to maintain a sufficient amount of open water within the sites to replicate natural marsh functions. The current BU sites constructed as part of the Houston Ship Channel project are problematic due to poor circulation of water throughout the created marshes. Circulation can be established by: 1) keeping the sites small and creating more edge (under 200 acres in size), 2) creating open water channels, 3) protecting or creating marsh and circulation channels at existing shorelines; i.e., constructing the site slightly "offshore".

¹Eric N. Powell, Junggeun Song, Matthew S. Ellis, and Elizabeth A. Wilson-Ormond. The Status and Long-Term Trends of Oyster Reefs in Galveston Bay, Texas. *Journal of Shellfish Research*, Vol. 14, No. 2, 439-457, 1995.

774

Mr. Chris Cornell
Project Engineer
DMMP first draft
July 10, 2001

Page 2

6.4.1. Swan Lake

The Service recommends swan lake restoration be completed in Phase I. A more detailed plan should be submitted for the construction of marsh within swan lake. The existing marsh habitat as well as the small shell islands located along the east edge should not be adversely impacted.

Part D- Beneficial Use Sites

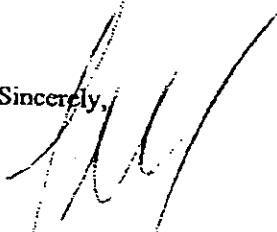
1. Goals and Objectives

An interagency meeting to discuss the proposed DMMP plan was attended on June 25, 2001 by the Texas Parks and Wildlife Department(TPWD), National Marine Fisheries Service (NMFS), and USFWS. The goals and objectives were reviewed by the agencies, and several changes were discussed. The agencies are continuing to review the goals and objections of the BUS and will provide detailed comments at a later date.

The beneficial use sites must be successfully managed and maintained throughout the life of the project.

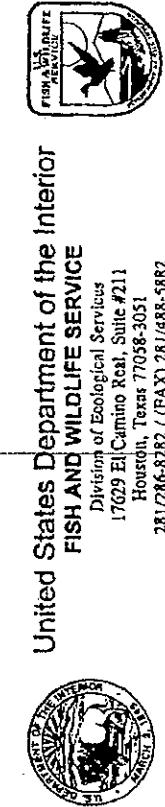
Thank you for the opportunity to comment on the first draft for the Dredge Material Management Plan for the Shoal Point Container Terminal. If you need any additional information, please contact me or Moni DeVora at 281/286-8282.

Sincerely,


Aet
Carlos H. Mendoza
Project Leader, Clear Lake ES Field Office

cc:

U.S. Army Corps of Engineers, Sharon Tirpak, Galveston TX
PBS&J, Cecilia Green, Paul Jensen, Austin, TX



**United States Department of the Interior
FISH AND WILDLIFE SERVICE**

Division of Ecological Services
17029 El Camino Real, Suite #211
Houston, Texas 77036-3051
281/286-8382 / FAX: 281/488-5882

February 21, 2002

Colonel Leonard D. Watworth
Galveston District, Corps of Engineers
Attn: Regulatory Branch, Sharon Mazzella Tirpak
P.O. Box 1229
Galveston, Texas 77553

Dear Colonel Watworth:

The Public Notice for Permit Application No. 21979 would permit the City of Texas City to construct the Shoal Point Container Terminal in three phases adjacent to the Texas City Channel on Shoal Point, an active dredged material placement area in Galveston County, Texas. This work would require the deepening of the Texas City Channel to 45 feet MLL and construction of a contiguous wharf area and turning basin generating 11 million cubic yards of material which would be used for beneficial uses. The access roadway to the site and the container yard would fill 13.34 acres of inter-tidal marsh and 9.7 acres of shallow open water for which 45 acres of wetlands would be constructed in the northern portion of Swan Lake. In addition, 357 acres of open water would be filled to construct a beneficial use site to replace the disposal capacity lost for Texas City Channel maintenance. Six additional dredged material placement areas are to be constructed over fifty years using material from incremental channel deepening, wharf dredging, and turning basin construction. These will also hold maintenance material until target elevations are reached and marsh grass is successfully established.

The revised Department of the Interior Manual Instructions (503 DM 1), dated August 3, 1973, assigns responsibility for Department of the Interior coordination and review of Department of the Army permit applications to the U.S. Fish and Wildlife Service. Our comments are provided in accordance with these instructions and with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661, et seq.).

The proposed access road will impact approximately 13 acres of intertidal marsh. The 0.48-acre area, located adjacent to Loop 197, may have submerged aquatic vegetation and is highly valuable habitat for a variety of fish and wildlife. One to two hundred birds can be seen utilizing this area on a daily basis. In addition, rails were observed feeding in this marsh and are known to nest in the same area in which they feed. We do not believe any mitigation offered would be acceptable for the loss of this 0.48-acres of marsh. In addition, the Service's interpretation of the access road footprint (see sheet 14) overlaid on the Virginian Point USGS 1995 DOQQ shows the impacts to be greater than 0.48-acres.

Recent studies contracted by the Galveston Bay National Estuary Program¹ found that Galveston Bay has lost over 34,000 acres of wetlands from 1950 to 1989 and the Virginia Point USGS quadrangle map (containing the project site) has suffered the greatest wetland loss of any USGS quadrangle. No efforts have been made by the applicant to avoid or minimize impacts to these wetlands. During the preparation

FWS1-1: Comments noted. The following procedure was followed to determine potential wetland impacts from the proposed access road alignment. A wetland delineation was performed and wetland boundaries were staked. USACE personnel verified the stake locations in the field. Staked areas were surveyed by a professional land surveyor. The proposed access corridor was then electronically overlayed on the surveyed wetland area coordinates and the potential impacts to wetlands were calculated. Photos were checked to compare acreage values and no discrepancy was identified. The surveyed wetland delineation (see Appendix A, Sheet 12) indicated 0.581 acres (0.015 and 0.566 acres) of open water and 0.479 acres of wetlands would be impacted adjacent to Loop 197 by the proposed access road.

No submerged aquatic vegetation (SAV) was observed in the open water area associated with these wetlands during the wetland delineation or the field verification by the USACE. The USACE believes that impacts to this marsh habitat can be mitigated.

FWS1-2: Several alternatives were considered by the applicant in the alignment of the access corridor and other project features. Many of the alignments that were considered to be feasible from an engineering standpoint were undesirable from an environmental perspective. As a result they were eliminated from further consideration prior to submittal of the permit application.

For example, early in the permit application preparation process, an alternative was considered to build an intermodal facility on Shoal Point. In order to construct the corridor, the Galveston County Discharge Canal was proposed to run through a viaduct under the proposed access corridor. Further evaluation by the applicant determined that the environmental, hydraulic and monetary issues associated with the intermodal facility were not warranted and the alternative was eliminated from further consideration.

Several other options were identified and considered. One of the proposed alternatives was to cross Swan Lake with a trestle bridge. This alternative was eliminated because of environmental considerations.

FWS1-1

FWS1-2

¹White, W.A., T.A. Tremblay, E.G. Wermund, Jr., and L.R. Handley. Trends and status of wetland and aquatic habitats in the Galveston Bay system, Texas. The Galveston Bay National Estuary Program Publication (GRNFP-31):225p.

To minimize potential impacts to wetlands and Swan Lake, the current alternative was proposed and investigated. This route uses upland areas on the discharge canal levee to the extent feasible, with some wetland impacts at the edge of Swan Lake (where the road footprint exceeds the upland levee area) and near Loop 197. On February 27, 2001, representatives of the USACE, TCIT, Berger/ABAM, and PBS&J met on site with representatives of FWS, NMFS, TPWD and GLO to discuss the wetland impacts on the edge of Swan Lake and the need to offset the access road at the connection with Loop 197. An offset from the levee along the canal was necessary because if the road remained on the levee all the way to Loop 197, the intersection would occur at the Loop 197 bridge over the canal, which is not acceptable from an engineering or practicability standpoint. The offset was minimized to the extent feasible, and the loss of the impacted wetland areas is considered unavoidable. These losses are accounted for in the calculation of wetland mitigation for the project.

The proposed access road alignment was chosen to minimize impacts to wetlands and wildlife habitat. Moving the currently proposed corridor would result in even more impacts to wetlands, and consequently wildlife habitat.

FWS1-3 & 1-4: Comments noted. Coordination with NMFS and other agencies has been an ongoing process in the development of the DMMP, especially in regards to monitoring and maintenance of the Beneficial Use sites. Modifications to the DMMP (Draft Report), (Appendix B) have been made per the request of NMFS and other agencies. See comments and responses to NMFS-13 through NMFS-26 for details regarding these changes. Ultimately, all BUS activities would be reviewed and overseen by the USACE.

Shoal point is a placement area which was once the focus of habitat creation within and around the periphery by installing openings and planting marsh grass, all which failed completely and for which no remediation was ever required. Whether the beneficial uses sites proposed for this project become beautiful, calm inter-tidal marsh habitat or garbage dumps in the bay is going to depend upon the degree of planning, commitment, and effort on the part of the applicant. We do not see this yet in the permit application. There are no specific promises as to how much marsh will be established in each placement area, what contingencies are promised, and any specific design features that the Corps can enforce over the next fifty years.

We like the ideas and concepts in this project and the efforts so far to demonstrate good faith in carrying out this work, but we do not believe the permit is detailed enough to be enforceable; the success of pilot marsh efforts on the Houston Ship Channel have not been completed to the satisfaction of the Service and, we believe, other environmental agencies.

The Service requested several important environmental protection features for the Dredged Material Management Plan to be included in the project. We do not see these in the public notice. These are:

It is very important to maintain a sufficient amount of open water within the sites to replicate natural marsh functions. The current sites constructed as part of the Houston Ship Channel project are problematic due to poor circulation of water throughout the created marshes. Circulation should be established by keeping the sites small and creating more edges (under 200 ac in size), creating open water channels, and protecting or creating marsh and circulation channels at existing shorelines; i.e., constructing sites slightly offshore where they do not abut land masses.

All Swan Lake marsh construction both as mitigation and as a beneficial uses site should be completed in Phase I. A detailed plan is needed for the construction of the marsh within Swan Lake since it already contains sensitive habitat and more damage than good could be done without proper care including damage to the existing marsh habitat as well as the small shell islands located along the east edge should not be adversely impacted.

Fluid Mud Flows (FLUMF) are not addressed in the public notice or the DEIS. The Service is concerned that FLUMF during and after BUS levee construction will have an adverse effect on benthic organisms and on areas that may have potential for oyster reef growth. The Service recommends a FLUMF study and monitoring plan be developed for the proposed BU sites. The monitoring plan should be modeled after the Houston-Galveston Navigation Channel (Contract No. 4, Dredging Upper Bay, Atkinson Levee Fluid Mud Flow Report, December 2001, prepared by Turner Coille & Braden Inc. for the Port of Houston Authority and the U.S. Army Corps of Engineers. A compensation plan should be implemented for impacts which may occur to benthic organisms and oyster/shell substrate in the surrounding area.

FWS1-5: Based on input from NMFS (see response to NMFS-8), the mitigation plan has been revised to specify that the tidal marsh channels will be designed so that all marsh areas are within ten meters of a marsh-water interface.

FWS1-6: Only 3 million yards of material would be available for use during Phase I. This is insufficient material to complete the SPBUS1 levees, Swan Lake mitigation site, Phase I project site development, and the entire Swan Lake restoration project. Also see responses to EPA-9 and EPA-10.

FWS1-7: The comment notes that Fluid Mud Flows (FLUMF) are not addressed in the DEIS. This has been corrected by noting and quantifying the potential effect in Section 4.2.15.2 of the FEIS. Essentially, this discussion recognizes that in the course of building Beneficial Use site levees, some of the material being discharged would be relatively fine and thus tend to not settle immediately on the levee. The amount of these fines would be a function of the characteristics of the dredged material and the pumping distance. With a short distance, more of the material would be in clay balls that settle rapidly. With a long distance, more of the cohesive new work material would be broken into fines with poor settling characteristics.

The December 2001 FLUMF report on the Atkinson Levee on the Houston Ship Channel suggested that a distance ranging from about 1,400 feet to about 2,500 feet from the levee center might be affected by fines to a depth of less than 2 inches. The report also notes some difficulty in distinguishing between the existing sediment and new FLUMF material. The affected area would experience a short-term habitat disruption following Beneficial Use site levee construction, but recolonization of the sediments by infaunal communities is expected to occur over a 3-12 month time period. In addition, any areas of hard bottom within the 2,500 ft swath could be buried and thus not be suitable for oyster habitat. However, this FLUMF material

tends to not settle easily and thus can easily be resuspended by larger wind waves. It is likely that areas with harder bottom have sufficient wave energy to maintain that condition and would revert to that condition after dredging is complete. Areas that would be shielded from wave energy, such as the one to the northwest of BUS3, would probably experience less wave scour. In this case the bottom would tend to accumulate more soft sediments, independent of the FLUMF process.

The USACE typically does not require compensatory mitigation for impacts related to creation of Beneficial Use sites because of the habitat value associated with beneficial uses as compared to traditional placement of dredged material (i.e., in upland placement areas).

Colonel Leonard D. Waterworth
Altar Regulatory Branch, Sharon Manzella Tippak
February 21, 2009 YZ

Page 3

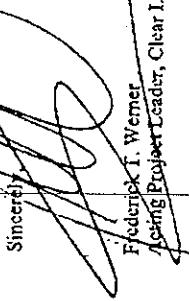
FWS1-8: The USACE will review and oversee the mitigation area and
Beneficial Use site construction.

FWS1-9: Comment noted. See responses to NMFS-19 and NMFS-24.

This project is vast, and its time frame for completion is two generations away. The beneficial use sites must be successfully managed and maintained throughout the life of the project. We see no reason why the Corps of Engineers does not require a bond to guarantee that, should the joint venture on this effort fail, there will be money available to complete projects begun but not yet finished.

We are simultaneously providing comments on the draft EIS which includes a Dredged Material Management Plan being worked on in coordination with conservation agencies. We believe formal coordination should continue over the life of the project as a permit requirement and key decisions be agreed upon by the participants before they are approved by the Corps for implementation to fulfill permit commitments. Our comments on the draft EIS will reflect the concerns expressed above and recommend that the EIS not be approved for acceptance until these matters are included as commitments for environmental protection.

I thank you for the opportunity to comment on this permit application. If you have any questions please contact me or Moni DeVora at 281/286-8382.


Sincerely,
Frederick F. Werner
Project Leader, Clear Lake IIS Field Office

cc:

Environmental Protection Agency, Marine & Wetlands Section 6WQ-EM, Dallas, TX
Texas General Land Office, La Porte, TX
Coastal Permitting Assistance Office, Port Alba, NRC, Corpus Christi, TX
National Marine Fisheries Service, Habitat Conservation Division, Galveston, TX
National Park Service, Southwest Region, Santa Fe, NM
Texas Natural Resource Conservation Commission, Watershed Management Div., Austin, TX
Texas Parks and Wildlife Department, Austin, TX
Texas Parks and Wildlife Department, Resource Protection Branch, Houston, TX



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229
DECEMBER 15, 2006

Environmental Section

Mr. Douglas Hoover
The City of Texas City
1801 9th Avenue North
P.O. Drawer 2608
Texas City, TX 77592-2608

Dear Mr. Hoover:

The US Army Corps of Engineers, Galveston District (CE), proposes to initiate a Programmatic Agreement (PA) pursuant to 36CFR800.6 and 36CFR800.14 (b)(3) to address impacts associated with improving navigation on the existing Texas City Channel, Galveston County, Texas. A Draft Environmental Assessment (EA) of the proposed improvements is planned to be released for public comment in late December, 2006. We find it necessary to negotiate a programmatic agreement because effects on historic properties cannot be fully determined prior to approval of this complex undertaking.

The following improvements are proposed in association with the Texas City Channel 45-Foot Project (TCC): 1) enlarging the existing channel to 45-feet deep and incidental widening in areas; 2) constructing two hydraulic fill groins on the north end of the Texas City Dike and filling the 90-acre area with dredged material to expand water-oriented recreational area; and, 3) a Dredged Material Management Plan (DMMP) for the disposal of new work and maintenance materials. All of these proposed improvements are shown on the maps provided as Enclosure 1. The location of these improvements corresponds to the area of potential effects (APE).

Most, but not all, of the APE has been surveyed for historic properties (Jones et al. 2002; Gearhart et al. 2005; Enright et al. 2005; Gearhart et al 2006). These reports can be provided to you upon request. The reports summarize historical research, nautical remote-sensing surveys and dive assessments which located a shipwreck which has been identified as the remains of the *USS Westfield* (41GV151). The *USS Westfield* is a U.S. Navy flagship that ran aground during the Battle of Galveston and was scuttled to prevent capture on January 1, 1863. We believe that evidence provided in the reports support a determination of eligibility under National Register criteria A, B, and D (36 CFR 60).

The CE proposes negotiation of a PA which outlines procedures to be followed to complete identification, evaluation and assessment investigations of the area of potential effects, and to address adverse effects to the wreck of the *USS Westfield*. This is the only eligible historic property that has been identified to date in the APE. The *USS Westfield* will be adversely affected by channel deepening as the wreck is situated partially within the navigation

channel proposed for deepening. Avoidance is not possible because the location of the channel is controlled by existing jetties.

We are proposing a four-party PA (Enclosure 2), to be negotiated among the CE, the City of Texas City (City), the U.S. Naval Historical Center (NHC), and the Texas State Historic Preservation Office (SHPO). The draft PA is being coordinated concurrently with all consulting parties and the Advisory Council on Historic Preservation (AChP). The intent of the PA is to avoid or mitigate impacts to historic properties in areas directly affected by new dredging and channel construction, construction staging and access areas, new or extensions of existing placement areas, areas affected by the beneficial uses of dredged material, and ongoing maintenance dredging activities relate to the TCC and to guide the development of a Treatment Plan for the remains of the *USS Westfield* to resolve adverse effects in accordance with 36 CFR 800.6.

In summary, the CE requests your review of the enclosed PA. Please provide a copy of your comments to all of the consulting parties (addresses provided below). Upon receipt of your comments and finalization of the draft PA in consultation with your office, the NHC and the SHPO, the CE will coordinate a final draft PA with interested Native American Indian tribes in accordance with 36 CFR 800.3 (f)(2). Public coordination required by § 800.3 (a) will be accomplished by inclusion of the final draft PA in the Draft EA, which will be made available for public review and comment. If you have any questions, please don't hesitate to call Ms. Nicole Minnichbach at 409-766-3878.

Sincerely,

Carolyn Murphy
Carolyn Murphy
Chief, Environmental Section

Enclosures:

- 1 Maps
- 2 Draft PA

CC w/o Enclosures

James E. Bruseth, Ph.D.
Deputy State Historic
Preservation Officer
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Ms. Barbara Voulgaris
The Naval Historical Center
805 Kidder Breese St., SE
Washington Navy Yard, DC 20374-5060

Mr. Don Klima
Advisory Council on Historic Preservation
Office of Federal Agency Programs
Old Post Office Building
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Ms. Janelle Stokes
CESWG-PE-PR

Ms. Nikki Minnichbach
CESWG-PE-PR

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DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229
DECEMBER 15, 2006

Environmental Section

Mr. Don Klima
Advisory Council on Historic Preservation
Office of Federal Agency Programs
Old Post Office Building
1100 Pennsylvania Avenue, NW, Suite 803
Washington, DC 20004

Dear Advisory Council on Historic Preservation (Council):

The US Army Corps of Engineers, Galveston District (CE), proposes to initiate a Programmatic Agreement (PA) pursuant to 36CFR800.6 and 36CFR800.14 (b)(3) to address impacts associated with improving navigation on the existing Texas City Channel, Galveston County, Texas. A Draft Environmental Assessment (EA) of the proposed improvements is planned to be released for public comment in late December, 2006. We find it necessary to negotiate a programmatic agreement because effects on historic properties cannot be fully determined prior to approval of this complex undertaking. With this letter, we invite your participation in the proposed PA pursuant 36 CFR 800.6 (a)(1)(i)(C).

The following improvements are proposed in association with the Texas City Channel 45-Foot Project (TCC): 1) enlarging the existing channel to 45-feet deep and incidental widening in areas; 2) constructing two hydraulic fill groins on the north end of the Texas City Dike and filling the 90-acre area with dredged material to expand water-oriented recreational area; and, 3) a Dredged Material Management Plan (DMMP) for the disposal of new work and maintenance materials. All of these proposed improvements are shown on the maps provided as Enclosure 1. The location of these improvements corresponds to the area of potential effects (APE).

Most, but not all, of the APE has been surveyed for historic properties (Jones et al. 2002; Gearhart et al. 2005; Enright et al. 2005; Gearhart et al 2006). These reports can be provided to you upon request. The reports summarize historical research, nautical remote-sensing surveys and dive assessments which located a shipwreck which has been identified as the remains of the *USS Westfield* (41GV151). The *USS Westfield* is a U.S. Navy flagship that ran aground during the Battle of Galveston and was scuttled to prevent capture on January 1, 1863. We believe that evidence provided in the reports support a determination of eligibility under National Register criteria A, B, and D (36 CFR 60).

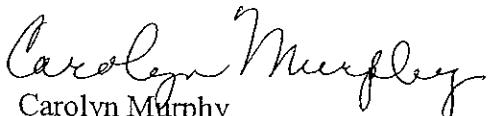
The CE proposes negotiation of a PA which outlines procedures to be followed to complete identification, evaluation and assessment investigations of the area of potential effects, and to address adverse effects to the wreck of the *USS Westfield*. This is the only eligible historic property that has been identified to date in the APE. The *USS Westfield* will be

adversely affected by channel deepening as the wreck is situated partially within the navigation channel proposed for deepening. Avoidance is not possible because the location of the channel is controlled by existing jetties.

We are proposing a four-party PA (Enclosure 2), to be negotiated among the CE, the City of Texas City (City), the U.S. Naval Historical Center (NHC), and the Texas State Historic Preservation Office (SHPO). The draft PA is being coordinated concurrently with all consulting parties and the Council. The intent of the PA is to avoid or mitigate impacts to historic properties in areas directly affected by new dredging and channel construction, construction staging and access areas, new or extensions of existing placement areas, areas affected by the beneficial uses of dredged material, and ongoing maintenance dredging activities relate to the TCC and to guide the development of a Treatment Plan for the remains of the *USS Westfield* to resolve adverse effects in accordance with 36 CFR 800.6.

We are notifying the Council of our intent to negotiate the PA for the TCC and inviting your participation pursuant 36 CFR 800.6 (a)(1)(i)(C). If you have any questions, please do not hesitate to call Ms. Nicole Minnichbach at 409-766-3878.

Sincerely,


Carolyn Murphy
Chief, Environmental Section

Enclosures:

- 1 Maps
- 2 Draft PA

CC w/o Enclosures

Ms. Janelle Stokes
CESWG-PE-PR

Ms. Nikki Minnichbach
CESWG-PE-PR

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DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229
DECEMBER 15, 2006

Environmental Section

Ms. Barbara Voulgaris
The Naval Historical Center
805 Kidder Breese St., SE
Washington Navy Yard, DC 20374-5060

Dear Ms. Voulgaris:

The US Army Corps of Engineers, Galveston District (CE), proposes to initiate a Programmatic Agreement (PA) pursuant to 36CFR800.6 and 36CFR800.14 (b)(3) to address impacts associated with improving navigation on the existing Texas City Channel, Galveston County, Texas. A Draft Environmental Assessment (EA) of the proposed improvements is planned to be released for public comment in late December, 2006. We find it necessary to negotiate a programmatic agreement because effects on historic properties cannot be fully determined prior to approval of this complex undertaking.

The following improvements are proposed in association with the Texas City Channel 45-Foot Project (TCC): 1) enlarging the existing channel to 45-feet deep and incidental widening in areas; 2) constructing two hydraulic fill groins on the north end of the Texas City Dike and filling the 90-acre area with dredged material to expand water-oriented recreational area; and, 3) a Dredged Material Management Plan (DMMP) for the disposal of new work and maintenance materials. All of these proposed improvements are shown on the maps provided as Enclosure 1. The location of these improvements corresponds to the area of potential effects (APE).

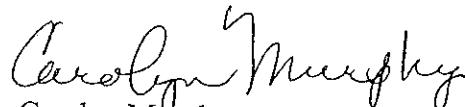
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The CE proposes negotiation of a PA which outlines procedures to be followed to complete identification, evaluation and assessment investigations of the area of potential effects, and to address adverse effects to the wreck of the *USS Westfield*. This is the only eligible historic property that has been identified to date in the APE. The *USS Westfield* will be adversely affected by channel deepening as the wreck is situated partially within the navigation channel proposed for deepening. Avoidance is not possible because the location of the channel is controlled by existing jetties.

We are proposing a four-party PA (Enclosure 2), to be negotiated among the CE, the City of Texas City (City), the U.S. Naval Historical Center (NHC), and the Texas State Historic Preservation Office (SHPO). The draft PA is being coordinated concurrently with all consulting parties and the Advisory Council on Historic Preservation (AChP). The intent of the PA is to avoid or mitigate impacts to historic properties in areas directly affected by new dredging and channel construction, construction staging and access areas, new or extensions of existing placement areas, areas affected by the beneficial uses of dredged material, and ongoing maintenance dredging activities relate to the TCC and to guide the development of a Treatment Plan for the remains of the *USS Westfield* to resolve adverse effects in accordance with 36 CFR 800.6.

In summary, the CE requests your review of the enclosed PA. Please provide a copy of your comments to all of the consulting parties (addresses provided below). Upon receipt of your comments and finalization of the draft PA in consultation with your office, the City and the SHPO, the CE will coordinate a final draft PA with interested Native American Indian tribes in accordance with 36 CFR 800.3 (f)(2). Public coordination required by § 800.3 (a) will be accomplished by inclusion of the final draft PA in the Draft EA, which will be made available for public review and comment. If you have any questions, please don't hesitate to call Ms. Nicole Minnichbach at 409-766-3878.

Sincerely,



Carolyn Murphy
Chief, Environmental Section

Enclosures:

- 1 Maps
- 2 Draft PA

CC w/o Enclosures

James E. Bruseth, Ph.D.
Deputy State Historic
Preservation Officer
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Mayor Matthew T. Doyle
CC at same address Mr. Douglas Hoover
The City of Texas City
1801 9th Avenue North
P.O. Drawer 2608
Texas City, TX 77592-2608

Mr. Don Klima
Advisory Council on Historic Preservation
Office of Federal Agency Programs
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1100 Pennsylvania Avenue, NW, Suite 803
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DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229
DECEMBER 15, 2006

Environmental Section

James E. Bruseth, Ph.D.
Deputy State Historic
Preservation Officer
Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

Dear Dr. Bruseth:

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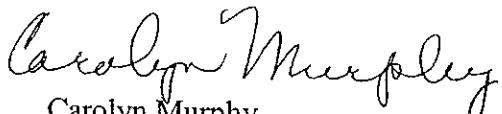
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Sincerely,



Carolyn Murphy
Chief, Environmental Section

Enclosures:

- 1 Maps
- 2 Draft PA

CC w/o Enclosures

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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

Environmental Section

October 7, 2005

David M. Bernhart
Assistant RA for Protected Resources
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, FL 33701

Dear Mr. Bernhart:

This letter is in regard to the Texas City Channel Deepening Project, Texas City, Galveston County, Texas (Enclosed Figure). The project proposes to deepen the existing 40-foot channel and turning basin to a depth of 45 feet. Dredged material would be beneficially used to construct confined areas for dredged maintenance material, eventually becoming emergent wetland habitat. Sand dredged from the existing Texas City Channel is proposed to be placed on the north side of the Texas City Dike. Two armored groins will be constructed to aid in reduction of long shore transport of sand material back into the Texas City Channel. This is essentially the same project that was addressed in the Shoal Point Container Terminal Project (Permit No. 21979).

To ensure compliance with the requirements of Section 7, subsection (a)(2) of the Endangered Species Act Amendments of 1978, a list of any species which is listed or proposed to be listed, that may be present in the area of the proposed action is requested.

If you or your staff have any questions regarding this activity, please contact Kristy Morten at (409) 766-3195.

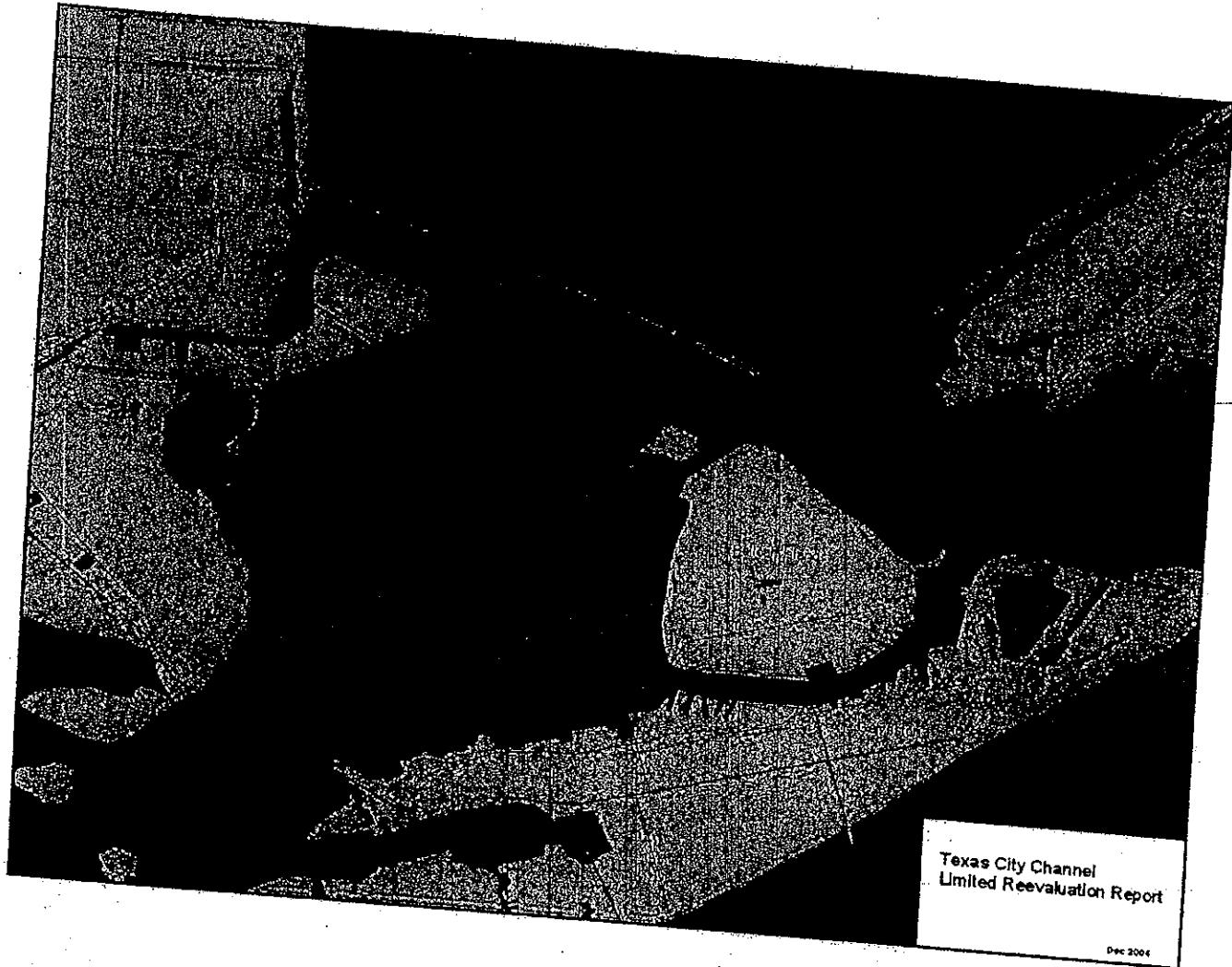
Sincerely,

Carolyn Murphy
Carolyn Murphy
Chief, Environmental Section

Enclosure

CF:

Mr. Rusty Swafford
National Marine Fisheries Service
Habitat Conservation Division
4700 Avenue U
Galveston, Texas 77551





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701
(727) 824-5312, FAX (727) 824-5309
<http://sero.nmfs.noaa.gov>

F/SER31:KS

MAR 16 2006

Ms. Carolyn Murphy
Galveston District Corps of Engineers
P.O. Box 1229
Galveston, TX 77553

Dear Ms. Murphy:

This responds to your February 7, 2006, letter regarding the Army Corps of Engineers' (COE) proposed project to dredge the Texas City Channel to a depth of 45 feet and beneficially use a portion of the dredged material to create approximately 664 acres of intertidal marsh adjacent to Shoal Point and Pelican Island. Sand dredged from the channel would be placed on the north side of the Texas City Dike. The project is located in Galveston Bay, Galveston County, Texas.

Your letter evaluated possible effects to species protected by the Endangered Species Act (ESA) under the purview of the National Marine Fisheries Service (NMFS). You requested NMFS' concurrence with your determination that the proposed project may affect, but is not likely to have a significant adverse effect on, listed species or critical habitat present. With your request you submitted a map of the proposed project. The materials submitted detailing the scope of the project and evaluating the possible effects on listed species under our purview are insufficient for us to make a determination about the effects of the project on these species.

To comply with section 7 regulations (50 CFR 402.14(c)), we specifically request that the following information be provided.

1. Please describe the project completely, including:
 - a. Expected start and end dates;
 - b. Construction methods to be utilized;
 - c. A description of the entire action area;
 - d. The boundaries of the action area;
 - e. The baseline conditions in the action area;
 - f. After-action (i.e., post-project construction) changes to the action area;
 - g. A biological assessment of the action area before and after the project;
 - h. All threatened and endangered (T/E) species potentially present in the action area, including sea turtles and smalltooth sawfish (we do not expect listed whales to be in the action area);
 - i. Potential impacts to T/E species and their habitat resulting from project activities;
 - j. Alternatives to the proposed action; and
 - k. Any conservation measures to be implemented to prevent or minimize potential adverse effects to T/E species.



Section 7 allows NMFS up to 90 days to conclude formal consultation with your agency, and an additional 45 days to prepare our biological opinion (unless we mutually agree to an extension). Therefore, if formal consultation is necessary, our anticipated biological opinion completion date is 135 days from the date of our receipt of the information requested above. The ESA requires that, after initiation of formal consultation, the federal action agency must make no irreversible or irretrievable commitment of resources that limits future options. This practice ensures agency actions do not preclude the formulation and implementation of reasonable and prudent alternatives that avoid jeopardizing the continued existence of endangered or threatened species, or destroying or modifying their critical habitats. If the information we have requested from the applicant allows us to determine that the section 7 consultation can be accomplished informally, NMFS will respond within 30 calendar days if possible.

If you have any questions, please contact Kelly Shotts, Biologist, at (225) 389-0508 x 209, or by e-mail at kelly.shotts@noaa.gov.

Sincerely,



David M. Bernhart
Assistant Regional Administrator
for Protected Resources

File: 1514-22.f.1.TX
Ref: I/SER/2006/00484



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

February 7, 2006

Environmental Section

David M. Bernhart
Assistant RA for Protected Resources
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, FL 33701

Dear Mr. Bernhart:

This is in response to your October 13, 2005 letter expressing concerns that the proposed Federal Texas City Channel deepening project will impact Federally listed species that may occur in the project area. Areas designated as critical habitat are essential to the conservation of a listed species and may require special management considerations or protection. Federal agencies may not fund, authorize, license, permit, or carry out an action that would destroy or adversely modify critical habitat.

The project proposes to deepen the existing 40-foot Texas City Channel and turning basin to a depth of 45 feet. This project is expected to be completed using a hydraulic pipeline dredge. Dredged material would be beneficially used to construct confined areas for dredged maintenance material adjacent to Shoal Point and Pelican Island. After the areas have reached a predetermined target elevation, the areas will be contoured, planted and shaped to form approximately 664 acres of intertidal marsh which is expected to benefit the production of fish and wildlife habitat. Sand dredged from the existing Texas City Channel is proposed to be placed on the north side of the Texas City Dike. Two armored groins will be constructed from new work material from the channel bend easing area to aid in reduction of long shore transport of sand material back into the Texas City Channel. This is essentially the same project that was addressed in the Shoal Point Container Terminal Project (Permit No. 21979).

The National Marine Fisheries Service (NMFS) has listed eight endangered and three threatened species that are under the jurisdiction of the NMFS for the state of Texas. The blue whale, finback whale, humpback whale, sei whale, sperm whale, hawksbill sea turtle, Kemp's ridley sea turtle, and the leatherback sea turtle are listed as endangered. The NMFS has listed the loggerhead sea turtle, the green sea turtle, and the gulf Sturgeon as threatened for the state of Texas.

The distribution of the blue whale in the western North Atlantic generally extends from the Arctic to at least mid-latitude waters, where it migrates to feeding grounds in the spring

and summer after wintering in subtropical and tropical waters. The blue whale is best considered as an occasional visitor in US Atlantic Exclusive Economic Zone (EEZ) waters, which may represent the current southern limit of its feeding. Records suggested an occurrence of this species south to Florida and the Gulf of Mexico, although the actual southern limit of the species' range is unknown.

Finback whales are common in waters of the US Atlantic Exclusive Economic Zone (EEZ), principally from Cape Hatteras northward. At-sea sightings in the north-central Gulf of Mexico confirm their presence throughout the year. Finback whales feed mainly on pelagic crustaceans and fish and are known to come close to shore in pursuit of fish along the New England coast. No sightings or records of finback whales are known to occur in the nearshore waters adjacent to the study area in the northwestern Gulf of Mexico.

Humpback whales occur in all oceans. In the western North Atlantic they migrate between their summer feeding grounds off Cape Cod to their winter calving and breeding grounds in the Caribbean. A total of four sightings and five captures in the Gulf of Mexico were reported, with the only recorded humpback whale sighting in Texas occurring off of Galveston.

Often found in deeper waters, Sei whales occur in all oceans, but are rare in tropical or polar seas. They are widely distributed in nearshore waters of the North Atlantic from the Gulf of Mexico and the Caribbean to Nova Scotia and Newfoundland. Their occurrence in the Gulf of Mexico is limited to strandings from Campeche, Mexico, Mississippi and Louisiana and to one probable at-sea sighting. No record of their occurrence in the nearshore waters of the study area exists. Although known to take fish prey, sei whales (like right whales) are largely planktivorous, feeding primarily on euphausiids and copepods.

Sperm whales are found throughout the world's oceans in deep waters to the edge of the ice at both poles. Although at least four sperm whale strandings have been recorded along the beaches of South Padre Island, its normal range is limited to the deeper waters beyond the continental shelf where it forages for squid and other deepwater species. Sperm whales appear to be the most abundant large cetacean in the Gulf of Mexico.

The relatively shallow Galveston Bay system is not suitable habitat for whales. The likelihood of encountering a whale in the project area is considered remote.

The Gulf sturgeon, also known as the Gulf of Mexico sturgeon, is a subspecies of the Atlantic sturgeon. Adult fish are bottom feeders, eating primarily invertebrates, including brachiopods, insect larvae, mollusks, worms and crustaceans. Gulf sturgeon are anadromous, with reproduction occurring in fresh water. Most adult feeding takes place in the Gulf of Mexico and its estuaries. The fish return to breed in the river system in which they hatched. Spawning occurs in areas of deeper water with clean (rock and rubble) bottoms. The eggs are

sticky and adhere in clumps to snags, outcroppings, or other clean surfaces. Historically, the Gulf sturgeon occurred from the Mississippi River to Charlotte Harbor, Florida. It still occurs, at least occasionally, throughout this range, but in greatly reduced numbers. The fish is essentially confined to the Gulf of Mexico. River systems where the Gulf sturgeon are known to be viable today include the Mississippi, Pearl, Escambia, Yellow, Choctawhatchee, Appachicola, and Swannee Rivers, and possibly others. The likelihood of encountering the Gulf sturgeon in the project area is possible, but only remotely probable.

All five sea turtle species have been reported along the Texas Coast, but the leatherback and hawksbill are the least common in the northwestern Gulf of Mexico and least likely to enter Texas bays. The leatherback is an oceanic species which does not normally enter estuaries. The hawksbill prefers rock or coral reefs in more tropical waters. The other three species of sea turtles, when sighted, are frequently found in coastal waters and bays. The green sea turtle is herbivorous and is most likely to occur in the southern bays of Texas where clear water and seagrass and algal beds are more abundant than in the study area of the upper Texas coast. Adult loggerheads are more commonly found offshore around oil platforms and rock reefs, but the juveniles are more likely to enter the bays to feed. The Kemp's ridley sea turtle migrates along the coast of Texas and is probably the most common sea turtle in Texas. It frequently enters bays to feed on shrimp, crab, and other invertebrates. Of all the sea turtles, only the Kemp's ridley and the loggerhead, have been recorded from Galveston Bay, with a loggerhead having been sighted in the Bolivar Roads area.

If present in the area, dredging activities may affect these sea turtle species through an increase in sedimentation and turbidity. The sedimentation may impact food sources for the turtles, and the turbidity could affect primary productivity. This would be short-term, however. There should be no physical impacts to sea turtles, as they are highly mobile and can avoid the cutterhead dredge expected to be used for this project. Pipeline dredges are relatively stationary and, therefore, act on small areas at any given time. An increase in marine traffic could result in a higher incidence of collision with sea turtles. There is no designated critical habitat identified for sea turtles in the project area and sea turtles are not expected to nest in the project area due to the lack of suitable habitat.

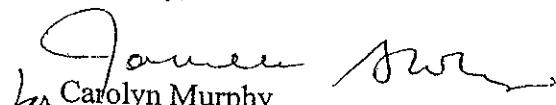
Nine fish species and one invertebrate are listed as Species of Concern (SOC) for the state of Texas: dusky shark, goliath grouper, largetooth sawfish, night shark, saltmarsh topminnow, sand tiger shark, speckled hind, Warsaw grouper, white marlin and the ivory bush coral. SOC are not protected under the Endangered Species Act, but are listed because of concerns about their status and should be considered during project planning. These species are listed due to their declining numbers, or in some cases, their slow recovery, and loss of habitat. Although remote, these fish could occur in the Texas City Channel project area, with the exception of the largetooth sawfish, saltmarsh topminnow, and the sand tiger shark that prefer shallow water depths. The Texas City Channel project area is not suitable habitat for the ivory bush coral. No Designated Critical Habitat under the jurisdiction of NMFS was

identified in the project area.

This review of the Texas City Channel deepening project activities relative to compliance with requirements of Section 7, subsection (a)(2) of the Endangered Species Act Amendments of 1978, indicates the project may affect, but is not likely to have a significant adverse affect on the listed species or critical habitat.

If you or your staff have any questions regarding this activity, please contact Kristy Morten at (409) 766-3195.

Sincerely,


for Carolyn Murphy
Chief, Environmental Section

Enclosure

CF:

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